



User Manual

**Wireless N900
Dual Band Gigabit Router
Cloud Router 3000**

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.0	October 31, 2012	• Initial release for Revision A1

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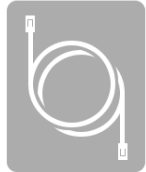
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Package Contents



Wireless N900 Dual Band Gigabit Router



Ethernet Cable



Power Adapter



Quick Install Guide

If any of the above items are missing, please contact your reseller.

Note: Using a power supply with a different voltage rating than the one included with the DIR-855L will cause damage and void the warranty for this product.

System Requirements

Network Requirements	<ul style="list-style-type: none"> • An Ethernet-based Cable or DSL modem • IEEE 802.11n or 802.11g wireless clients (2.4GHz) • IEEE 802.11n or 802.11a wireless clients (5GHz) • 10/100/1000 Ethernet
Web-based Configuration Utility Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none"> • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter <p>Browser Requirements:</p> <ul style="list-style-type: none"> • Internet Explorer 7 or higher • Firefox • Chrome • Safari 4 or higher <p>Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</p>
mydlink Requirements (PC/Mac/Mobile Devices)	<ul style="list-style-type: none"> • iPhone/iPad/iPod Touch (iOS 3.0 or higher) • Android device (1.6 or higher) • Computer with the following browser requirements: <ul style="list-style-type: none"> • Internet Explorer 7 or higher • Firefox • Chrome • Safari 5 or higher
SharePort Mobile App Requirements	<ul style="list-style-type: none"> • iPhone/iPad/iPod Touch (iOS 4.3 or higher) • Android device (2.0 or higher)

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Introduction

The D-Link Wireless N900 Dual Band Gigabit Router (DIR-855L) comes equipped with 4 Gigabit ports to provide speeds up to 10x faster than standard 10/100 ports. It also uses 802.11n technology with multiple intelligent antennas to maximize the speed and range of your wireless signal to significantly outperform 802.11g devices.

With the addition of Intelligent Quality of Service (QoS), data streams are separated which helps organize and prioritize your network traffic so your video streaming, gaming, and VoIP calls run smoother over both your wired and wireless network.

The D-Link Cloud Service will allow you to always have access to your home network no matter where you go. Now you can monitor and manage your home network right from your laptop, iPhone®, iPad®, or Android™ device. The cloud-enabled router can be configured to send an e-mail to keep you informed anywhere, anytime when new devices are connecting to your network or unwanted access is detected. Monitor in real-time websites that are being visited with recent browser history displayed on the mydlink™ Lite app – which is great for parents.

The D-Link Cloud Service can detect and block unwelcome guests who try to get into your wireless network, and suspicious activities will be displayed right on your mydlink™ Lite app or browser.

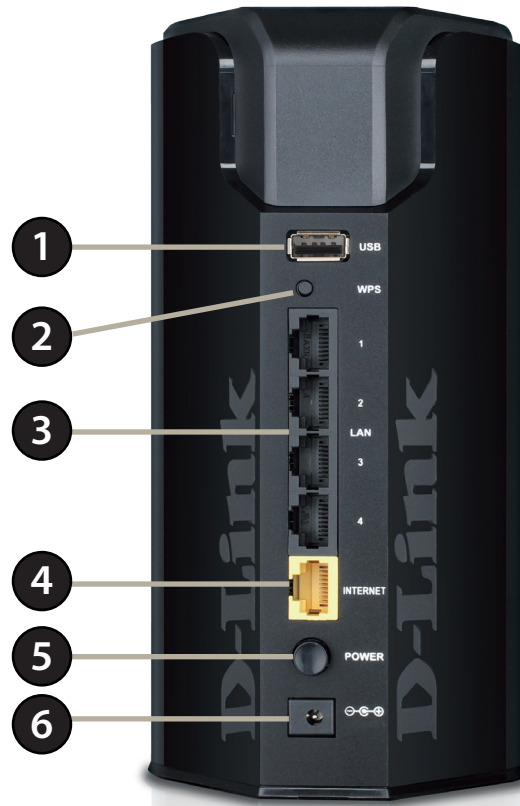
Features

- **Faster Wireless Networking** - The DIR-855L provides up to 900Mbps* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio. The performance of this 802.11n wireless router gives you the freedom of wireless networking at speeds faster than 802.11g.
- **Compatible with 802.11a/g Devices** - The DIR-855L is still fully compatible with the IEEE 802.11g and 802.11a standards, so it can connect with existing 802.11g and 802.11a PCI, USB, and Cardbus adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
 - **Content Filtering** - Easily applied content filtering based on MAC Address, URL, and/or Domain Name.
 - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
 - **Secure Multiple/Concurrent Sessions** - The DIR-855L can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-855L can securely access corporate networks.
- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-855L lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

Hardware Overview

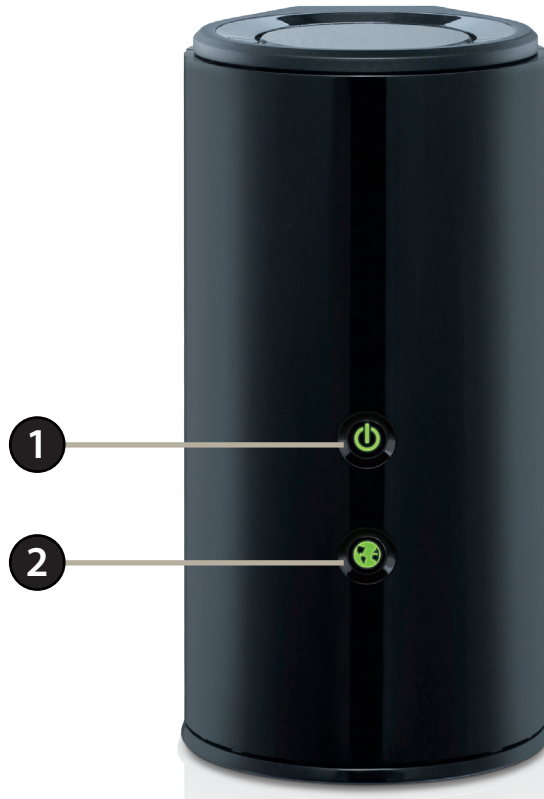
Connections



1	USB Port	Connect a USB flash drive to share content throughout your network.
2	WPS Button	Press to start the WPS process. The Power LED will start to blink.
3	LAN Ports (1-4)	Connect 10/100/1000 Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
4	Internet Port	Using an Ethernet cable, connect your broadband modem to this port.
5	Power Button	Press the power button to power on and off.
6	Power Receptor	Receptor for the supplied power adapter.

Hardware Overview

LEDs



1	Power LED	A solid green light indicates a proper connection to the power supply. The light will blink green during the WPS process and will be solid orange during boot-up.
2	Internet LED	A solid light indicates connection on the Internet port. If the LED is orange, the connection is good but the router cannot connect to the Internet. If this LED is blinking orange, this indicates that the “on demand” connection type is set and the Internet connection is idle.

Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, in the attic or garage.

Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- You can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump or Enternet 300 from your computer or you will not be able to connect to the Internet.
- Several Internet providers (ISPs) such as Verizon and AT&T will supply you with a modem/router combo. Please verify your modem is not also a router before installing. Connecting two routers together may not work correctly. If you do have a modem/router combo, you must put your modem/router in Bridge mode to bypass the router functions which will allow your DIR-855L router to work properly. Please contact your ISP or refer to your modem's user guide for more information.

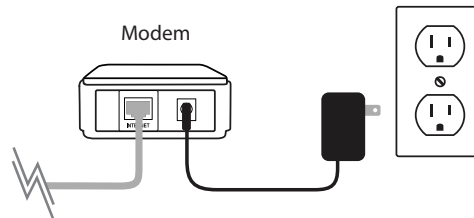
Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

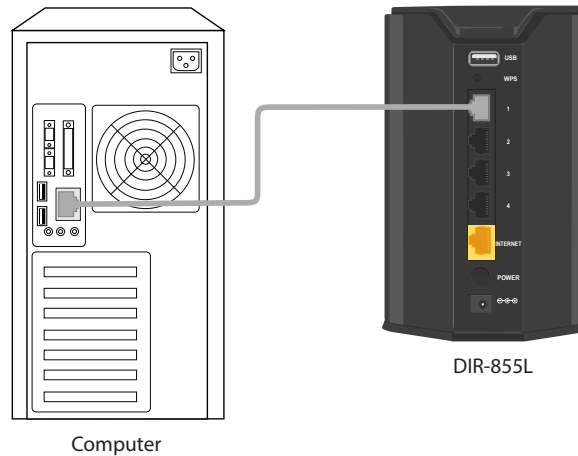
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Manual Setup

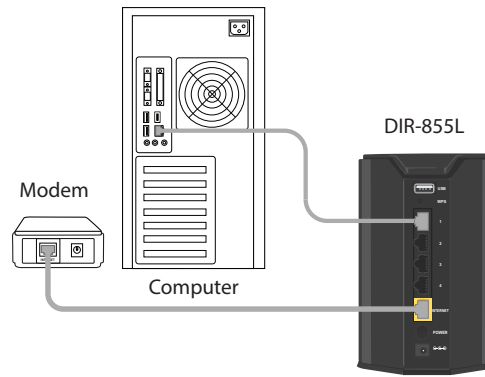
1. Turn off and unplug your cable or DSL broadband modem. This is required.



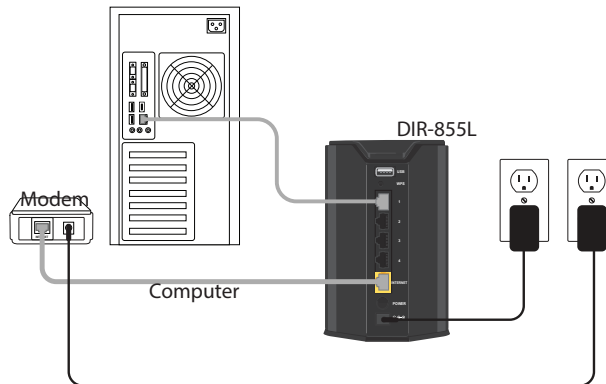
2. Position your router close to your modem and a computer. Place the router in an open area of your intended work area for better wireless coverage.
3. Unplug the Ethernet cable from your modem (or existing router if upgrading) that is connected to your computer. Plug it into the LAN port labeled **1** on the back of your router. The router is now connected to your computer.



4. Plug one end of the included blue Ethernet cable that came with your router into the yellow port labeled INTERNET on the back of the router. Plug the other end of this cable into the Ethernet port on your modem.



5. Reconnect the power adapter to your cable or DSL broadband modem and wait for two minutes.
6. Connect the supplied power adapter into the power port on the back of the router and then plug it into a power outlet or surge protector. Press the power button and verify that the power LED is lit. Allow one minute for the router to boot up.



7. Open a web browser. For first time setup, you will automatically be directed to the D-Link Setup Wizard. Skip to page 14. If the wizard does not appear, you can manually log in and configure your router. Refer to page 26.

Connect to an Existing Router

Note: *It is strongly recommended to replace your existing router with the DIR-855L instead of using both. If your modem is a combo router, you may want to contact your ISP or manufacturer's user guide to put the router into Bridge mode, which will 'turn off' the router (NAT) functions.*

If you are connecting the DIR-855L to an existing router to use as a wireless access point and/or switch, you will have to do the following to the DIR-855L before connecting it to your network:

- Disable UPnP™
- Disable DHCP
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.0.xxx (where xxx is between 2 and 254). Please see the **Networking Basics** section for more information. If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.
2. Open a web browser, enter **http://dlinkrouter.local** and press **Enter**. When the login window appears, set the user name to **Admin** and leave the password box empty. Click **Log In** to continue. Note that a first time setup will automatically launch the D-Link Setup Wizard. If the wizard appears, click **Cancel**.
3. Click on **Advanced** and then click **Advanced Network**. Uncheck the **Enable UPnP** checkbox. Click **Save Settings** to continue.
4. Click **Setup** and then click **Network Settings**. Uncheck the **Enable DHCP Server** checkbox. Click **Save Settings** to continue.

5. Under Router Settings, enter an available IP address and the subnet mask of your network. Click **Save Settings** to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.
6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.
7. Connect an Ethernet cable in one of the LAN ports of the router and connect it to your other router. Do not plug anything into the Internet (WAN) port of the D-Link router.
8. You may now use the other three LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router. Refer to the **Configuration** section for more information on setting up your wireless network.

Configuration

There are several different ways you can configure your router to connect to the Internet and connect to your clients:

- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to page 14.
- **QRS Mobile App** - Use your iPhone, iPad, or iPod Touch to configure your router. Refer to page 21.
- **Manual Setup** - Log into and manually configure your router (advanced users only). Refer to page 26.

Quick Setup Wizard

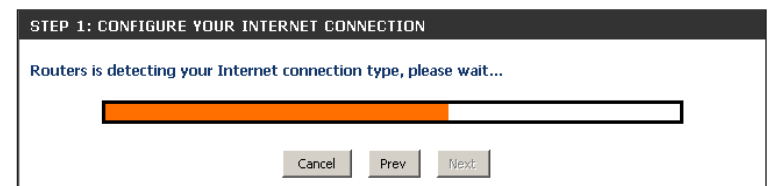
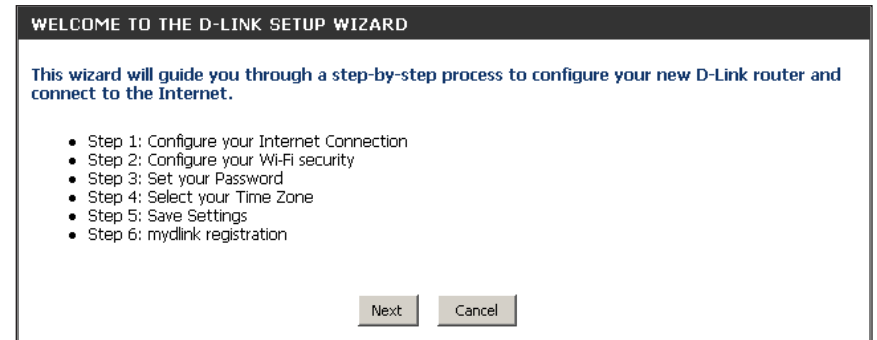
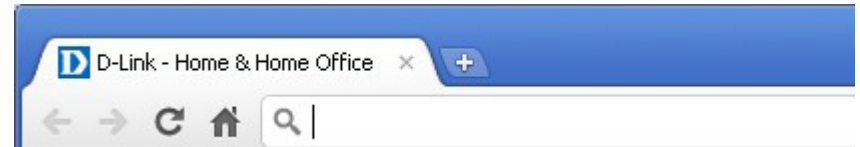
If this is your first time installing the router, open your web browser. You will automatically be directed to the *Wizard Setup* screen.

If you have already configured your settings and you would like to access the configuration utility, please refer to page 26.

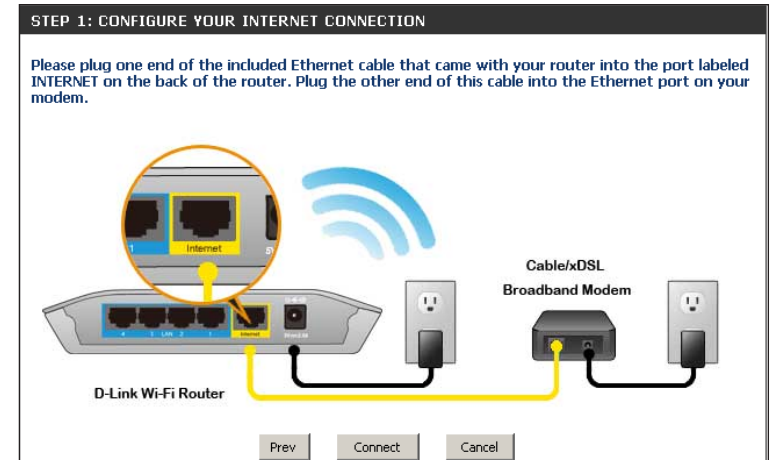
This wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click **Next** to continue.

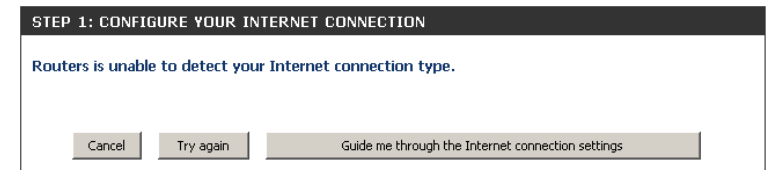
Please wait while your router detects your internet connection type. If the router detects your Internet connection, you may need to enter your ISP information such as username and password.



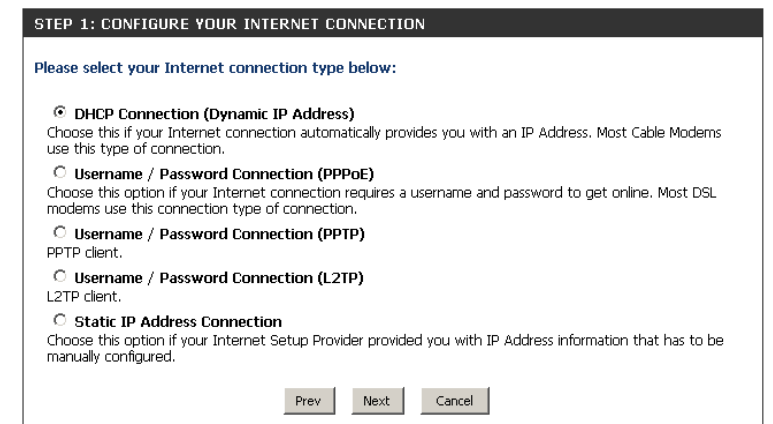
If the router does not detect a valid Ethernet connection from the Internet port, this screen will appear. Connect your broadband modem to the Internet port and then click **Connect**.



If the router detects an Ethernet connection but does not detect the type of Internet connection you have, this screen will appear. Click **Guide me through the Internet Connection Settings** to display a list of connection types to choose from.



Select your Internet connection type and click **Next** to continue.



If the router detected or you selected **PPPoE**, enter your PPPoE username and password and click **Next** to continue.

Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work with a router.

If the router detected or you selected **PPTP**, enter your PPTP username, password and other information supplied by your ISP. Click **Next** to continue.

If the router detected or you selected **L2TP**, enter your L2TP username, password and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME AND PASSWORD CONNECTION (PPPOE)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.

User Name :

Password :

SET USERNAME AND PASSWORD CONNECTION (PPTP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP address. If you do not have this information, please contact your ISP.

Address Mode : Dynamic IP Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

PPTP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

SET USERNAME AND PASSWORD CONNECTION (L2TP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP address. If you do not have this information, please contact your ISP.

Address Mode : Dynamic IP Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

If the router detected or you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.

SET STATIC IP ADDRESS CONNECTION

To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.

IP Address :

Subnet Mask :

Gateway Address :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

For both the 2.4GHz and 5GHz segments, create a wireless network name (SSID) using up to 32 characters.

Create a wireless security passphrase or key (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

Click **Next** to continue.

STEP 2: CONFIGURE YOUR WI-FI SECURITY

Give your Wi-Fi network a name and a password. (2.4GHz Band)

Wi-Fi Network Name (SSID) : (Using up to 32 characters)

Wi-Fi Password : (Between 8 and 63 characters)

Give your Wi-Fi network a name and a password. (5GHz Band)

Wi-Fi Network Name (SSID) : (Using up to 32 characters)

Wi-Fi Password : (Between 8 and 63 characters)

In order to secure your router, please enter a new password. Check the **Enable Graphical Authentication** box to enable CAPTCHA authentication for added security. Click **Next** to continue.

STEP 3: SET YOUR PASSWORD

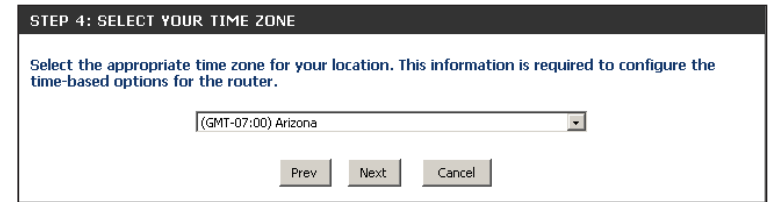
By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent unauthorized online users and hacker software from accessing your network settings.

Password :

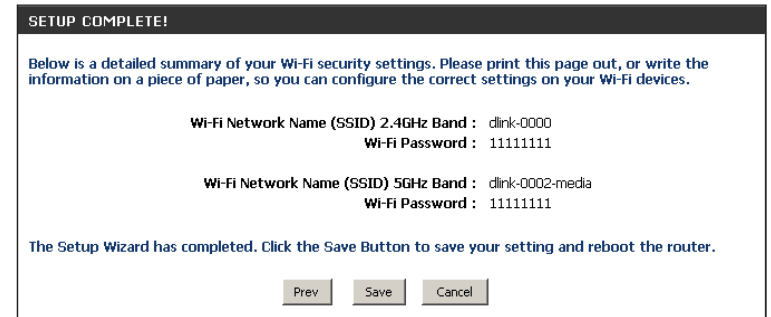
Verify Password :

Enable Graphical Authentication :

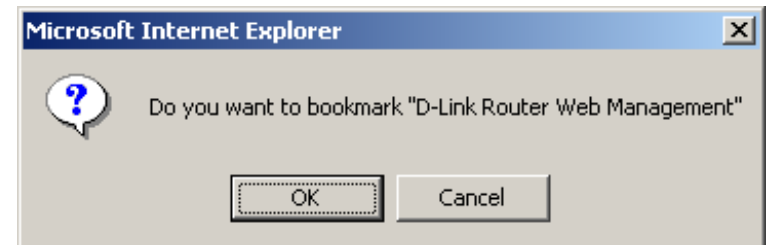
Select your time zone from the drop-down menu and click **Next** to continue.



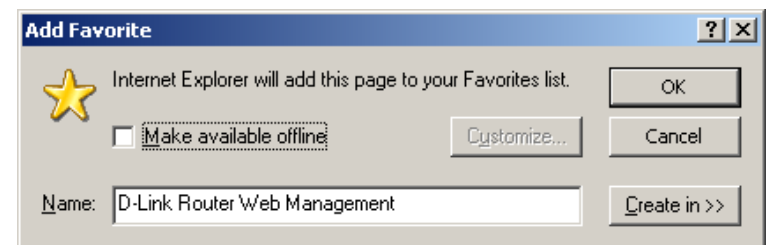
The *Setup Complete* window will display your wireless settings. Click **Save and Connect** to continue.



If you want to create a bookmark to the router, click **OK**. Click **Cancel** if you do not want to create a bookmark.



If you clicked **Yes**, a window may appear (depending on what web browser you are using) to create a bookmark.



To use the *mydlink* service (mydlink.com or the mydlink Lite app), you must have an account. Select if you do have a *mydlink* account or if you need to create one. Click **Next** to continue.

If you do not want to register at this time, click **Cancel**.

If you clicked **Yes**, enter your *mydlink* account name (e-mail address) and password. Click **Login** to register your router.

If you clicked **No**, fill out the requested information and click **Next** to create your *mydlink* account.

Your router setup is complete.

STEP 6: MYDLINK REGISTRATION

To use the features of mydlink.com and the mydlink Lite app, you will need an account with mydlink.com. If you already have an account, select Yes, I have a mydlink account and click Next to register the router with mydlink.com. If you do not have an account, select No, I want to register and login with a new mydlink account and click Next to create an account. If you do not wish to sign up for the mydlink service, please click Cancel.

Do you have mydlink account?

Yes, I have a mydlink account.

No, I want to register and login with a new mydlink account.

STEP 6: MYDLINK REGISTRATION

E-mail Address (Account Name):

Password:

STEP 6: MYDLINK REGISTRATION

Please fulfill the options to complete the registration.

E-mail Address(Account Name):

Password:

Confirm Password:

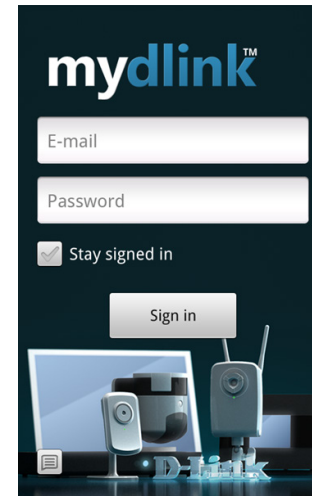
First Name:

Last Name:

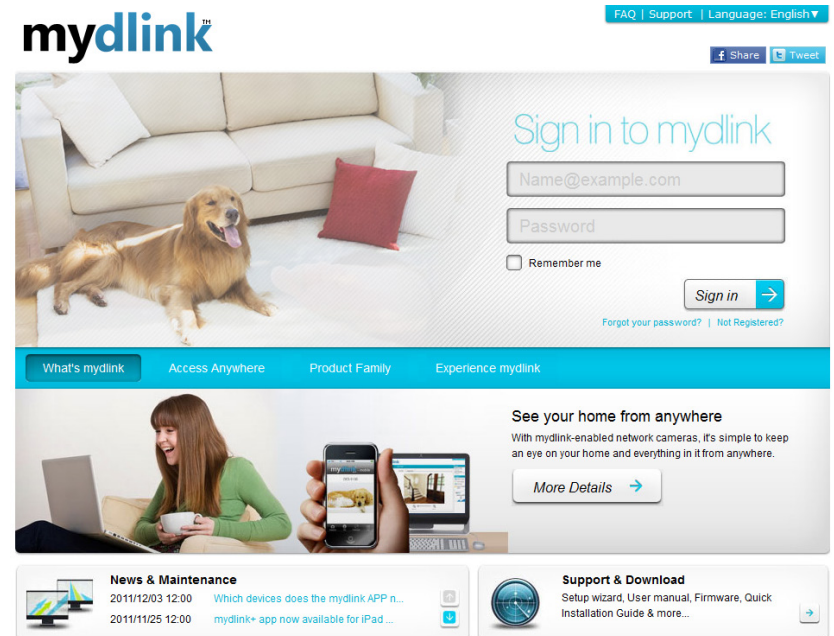
[I Accept the mydlink terms and conditions.](#)

The *mydlink* app will allow you to receive notices, browse network users and configure your router from an iPhone/iPad/iPod Touch (iOS 3.0 or higher), or Android device (1.6 or higher).

To download the *mydlink Lite* app, visit the Apple Store, Android Market or <http://mydlink.com/Lite>.



PC and Mac users can use the *mydlink* portal at <http://mydlink.com>.



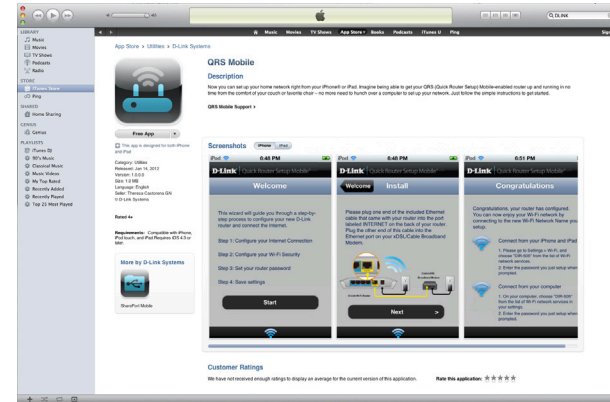
QRS Mobile App

Set up the router using your iPad or iPhone

D-Link offers an app for your iPad, iPod Touch, iPhone (iOS 4.3 or higher), or Android device to install and configure your router.

Step 1

From your mobile device, go to the iTunes Store or Google Play and search for "D-Link." Select **QRS Mobile** and then download it.



Step 2

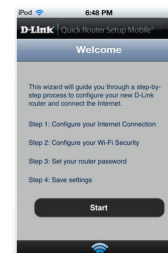
Once your app is installed, you may now configure your router. Connect to the router wirelessly by going to your wireless utility on your device. Scan for the wireless network name (SSID) as listed on the supplied info card. Select and then enter your security password (Wi-Fi Password).

D-Link DIR-855L Wi-Fi Configuration Note

Web browser link: http://dlinkrouter or http://192.168.0.1	Web browser link: http://dlinkrouter or http://192.168.0.1
Default configuration Username: "Admin" Password: "" (leave the field blank)	Your configuration Username: Admin Password: <input type="text"/>
Wi-Fi Name (SSID): dlink-a8fa	Wi-Fi Name (SSID): <input type="text"/>
Wi-Fi Password: akbdj19368	Wi-Fi Password: <input type="text"/>

Step 3

Once you connect to the router, launch the *QRS Mobile* app and it will guide you through the installation of your router.



SharePort Mobile App

The *SharePort™ Mobile* app makes it simple to access media saved on your USB drive right from your iPhone, iPad or Android device. Just follow the three simple steps below:

1. Download the *SharePort Mobile* app from the Apple App Store or the Google play store to your mobile device.
2. Plug the USB flash drive with media content such as movies (mov or mp4), music (mp3 or wav), photos (jpg, bmp, gif or png), or documents (key, pages, numbers, txt, ref, doc, Ppt, XIS, or Pdf) to the DIR-855L.
3. Connect your mobile device wirelessly to the DIR-855L. Open the *SharePort Mobile* app and you will be able to stream your movies, music and photos to all your mobile devices.

Note: You must enable the *SharePort Web Access* option from the **Setup > Storage** page (refer to page 52 - manual setup) for this app to work properly.

App Installation

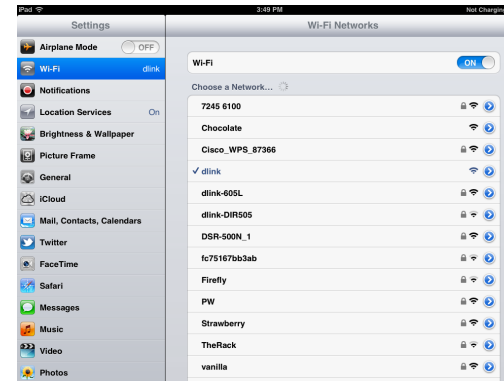
1. Insert your USB thumb drive or external hard drive into the DIR-855L.
2. Scan this code using a barcode scanner app (e.g, *Bakodo* or *RedLaser*) from your iOS or Android device. If you do not have the app, search for "*D-link SharePort Mobile*" from the App Store or the Google play store to begin the installation process. Please make sure you have an Internet connection before downloading the app.



3. From your mobile device, click **Settings**.

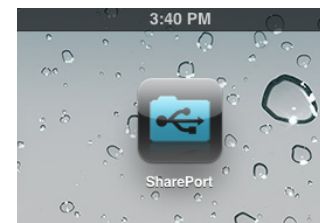


4. **iOS** (shown) - Press **Wi-Fi**, select the wireless network (SSID) that you created in the setup and then enter your Wi-Fi password.

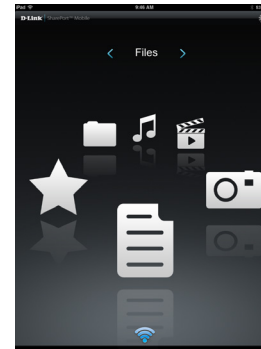


Android - Press **Wireless & Networks > Wi-Fi Settings** and then select the wireless network (SSID) that you created in the setup. Enter your Wi-Fi password.

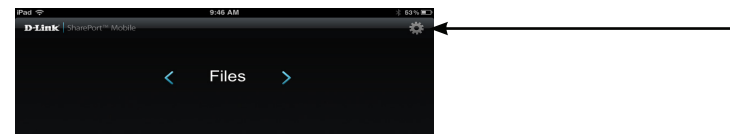
5. Once connected, click on the **SharePort Mobile** icon.



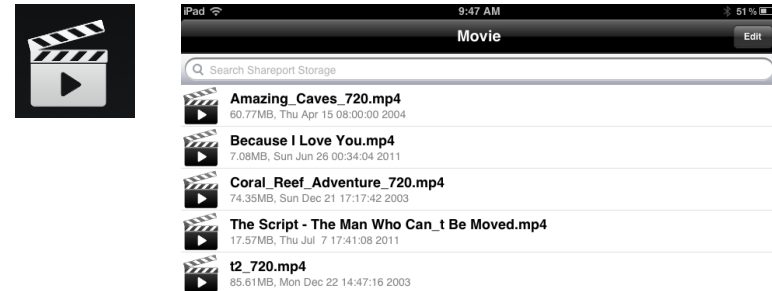
6. The following screen will appear.



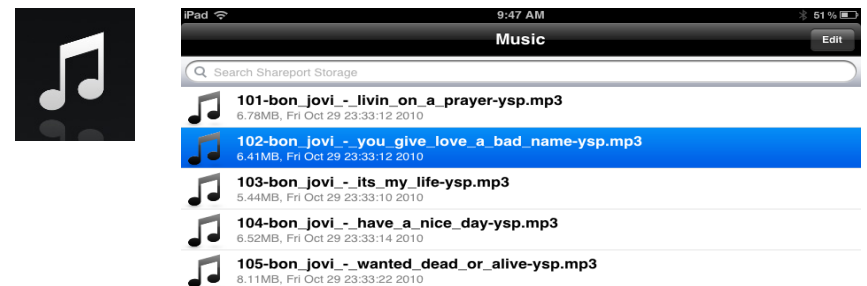
7. Click on **Settings** icon located on the right top corner of the screen. Click **Edit** to enter your User Name and Password. Once you finish, click **Done** to continue.



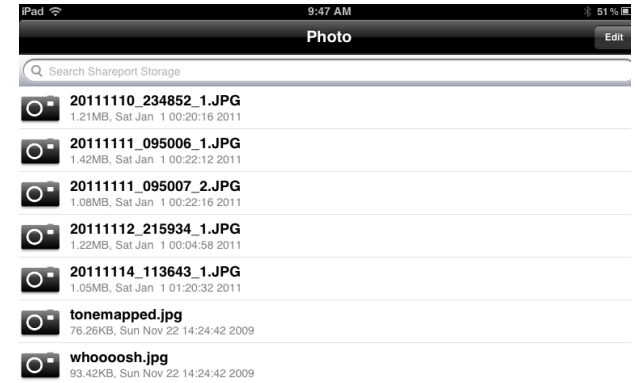
8. For the *Movie* section, click the **Movie** icon to play your movie from your USB flash drive.



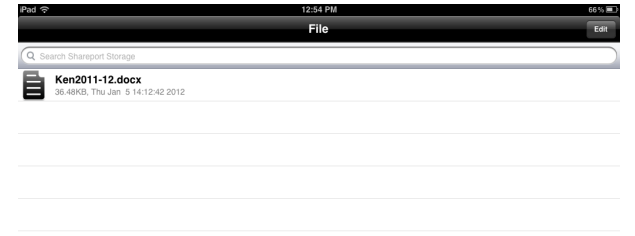
9. For the *Music* section, click the **Music** icon to play your music from your USB flash drive.



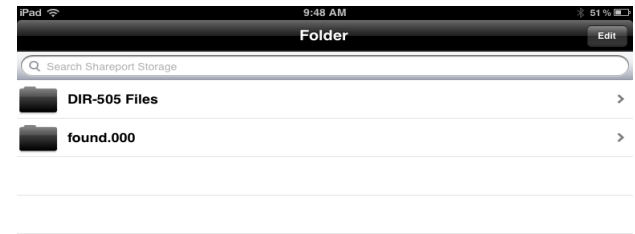
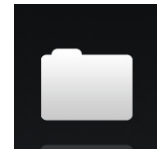
10. For the *Photo* section, click the **Photo** icon to view your photos from your USB flash drive.



11. For the *Files* section, click on the **Files** icon to view your files from your USB flash drive.



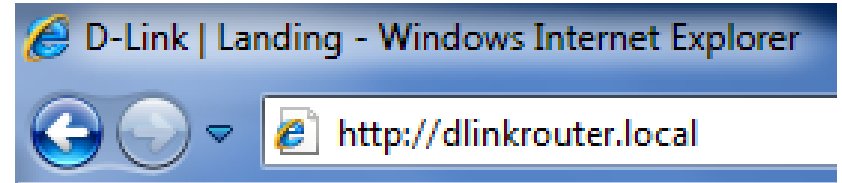
12. For the *Folder* section, click the **Folder** icon to view your folders from your USB flash drive.



Web-based Configuration Utility

To access the *Configuration Utility*, open a web-browser, such as Internet Explorer, and enter **http://dlinkrouter.local**.

You may also connect by typing the router's LAN IP address (**http://192.168.0.1**) in the address bar.



Enter your password and click **Log In**. Leave the password blank by default.

A screenshot of the LOGIN page for the router configuration utility. The page has an orange header with the word "LOGIN" in white. Below the header, the text "Log in to the router" is displayed. There are two input fields: "User Name" with the text "Admin" entered, and "Password" which is currently blank. To the right of the password field is a "Log In" button.

Internet Connection Setup

Click **Manual Internet Connection Setup** to configure your connection manually and continue to the next page.

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. You will be directed to the *Quick Setup Wizard*. Please refer to page 14.

The screenshot displays the D-Link DIR-855L web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, STORAGE, IPV6, and MYDLINK SETTING. The main content area is titled "INTERNET CONNECTION" and provides instructions on how to set up the Internet connection. It offers two options: using the "Internet Connection Setup Wizard" or "Manual Internet Connection Setup". A note advises users to follow the Quick Installation Guide before launching the wizards. A "Helpful Hints..." sidebar on the right provides additional guidance for new and advanced users.

DIR-855L //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
INTERNET	INTERNET CONNECTION				Helpful Hints... If you are new to networking and have never configured a router before, click on Internet Connection Setup Wizard and the router will guide you through a few simple steps to get your network up and running. If you consider yourself an advanced user and have configured a router before, click Manual Internet Connection Setup to input all the settings manually. More...
WIRELESS SETTINGS	There are two ways to set up your Internet connection. You can use the Web-based Internet Connection Setup Wizard, or you can manually configure the connection.				
NETWORK SETTINGS	INTERNET CONNECTION SETUP WIZARD If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below. <div style="text-align: center;"> <input type="button" value="Internet Connection Setup Wizard"/> </div> <p>Note : Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.</p>				
MEDIA SERVER	MANUAL INTERNET CONNECTION OPTIONS If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below. <div style="text-align: center;"> <input type="button" value="Manual Internet Connection Setup"/> </div>				
STORAGE	WIRELESS				
IPV6					
MYDLINK SETTING					

Manual Internet Setup

Static (assigned by ISP)

Select **Static IP Address** if all the Internet port's IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The router will not accept the IP address if it is not in this format.

My Internet Connection: Select **Static IP** to manually enter the IP settings supplied by your ISP.

Enable Advanced DNS Service: *Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.*

Disclaimer: *D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.*

Enable True Gigabit Routing Connectivity: Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

IP Address: Enter the IP address assigned by your ISP.

Subnet Mask: Enter the Subnet Mask assigned by your ISP.

Default Gateway: Enter the Gateway assigned by your ISP.

DNS Servers: The DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

INTERNET CONNECTION TYPE

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is :

ADVANCED DNS SERVICE

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

TRUE GIGABIT ROUTING CONNECTIVITY SETTING

Enable True Gigabit Routing Connectivity :

STATIC IP ADDRESS INTERNET CONNECTION TYPE

Enter the static address information provided by your Internet Service Provider (ISP).

IP Address :

Subnet Mask :

Default Gateway :

Primary DNS Server :

Secondary DNS Server :

MTU : (bytes) MTU default = 1500

MAC Address :

Copy Your PC's MAC Address

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the DIR-855L. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Copy Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Manual Internet Setup

Dynamic (Cable)

My Internet Connection: Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for cable modem services.

Enable Advanced DNS Service: *Advanced Domain Name System (DNS) services* enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

Disclaimer: *D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.*

Enable True Gigabit Routing Connectivity: Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

Host Name: The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.

Use Unicasting: Check the box if you are having problems obtaining an IP address from your ISP.

Primary/Secondary DNS Server: Enter the Primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave at 0.0.0.0 if you did not specifically receive these from your ISP.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Copy Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

INTERNET CONNECTION TYPE

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is :

ADVANCED DNS SERVICE

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

TRUE GIGABIT ROUTING CONNECTIVITY SETTING

Enable True Gigabit Routing Connectivity :

DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE

Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.

Host Name :

Use Unicasting : (compatibility for some DHCP Servers)

Primary DNS Server :

Secondary DNS Server :

MTU : (bytes) MTU default = 1500

MAC Address :

Manual Internet Setup

PPPoE (DSL)

Choose **PPPoE (Point to Point Protocol over Ethernet)** if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

My Internet Connection: Select **PPPoE (Username/Password)** from the drop-down menu.

Enable Advanced DNS Service: *Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.*

Disclaimer: *D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.*

Enable True Gigabit Routing Connectivity: Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnect

Mode: Select either **Always-on**, **On-Demand** or **Manual**.

INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : <input type="text" value="PPPoE (Username / Password)"/>
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service : <input type="checkbox"/>
TRUE GIGABIT ROUTING CONNECTIVITY SETTING
Enable True Gigabit Routing Connectivity : <input checked="" type="checkbox"/>
PPPOE INTERNET CONNECTION TYPE
Enter the information provided by your Internet Service Provider (ISP).
Address Mode : <input checked="" type="radio"/> Dynamic IP (DHCP) <input type="radio"/> Static IP
IP Address : <input type="text" value="0.0.0.0"/>
Username : <input type="text"/>
Password : <input type="password" value="*****"/>
Verify Password : <input type="password" value="*****"/>
Service Name : <input type="text"/> (Optional)
Reconnect Mode : <input type="radio"/> Always on <input checked="" type="radio"/> On demand <input type="radio"/> Manual
Maximum Idle Time : <input type="text" value="5"/> (minutes, 0=infinite)
Primary DNS Address : <input type="text" value="0.0.0.0"/> (Optional)
Secondary DNS Address : <input type="text" value="0.0.0.0"/> (Optional)
MTU : <input type="text" value="1492"/> (bytes) MTU default = 1492
MAC Address : <input type="text"/>
<input type="button" value="Clone Your PC's MAC Address"/>

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable **Auto-reconnect**.

DNS

Addresses: Enter the Primary and Secondary DNS Server Addresses (Static PPPoE only).

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Copy Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Manual Internet Setup

PPTP

Choose **PPTP (Point-to-Point-Tunneling Protocol)** if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

My Internet

Connection: Select **PPTP (Username/Password)** from the drop-down menu.

Enable Advanced DNS Service: *Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.*

Disclaimer: *D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.*

Enable True Gigabit Routing Connectivity: Check to enable true Gigabit routing. This will increase the throughput of the WAN-LAN connectivity of the router.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

PPTP IP Address: Enter the IP address (Static PPTP only).

PPTP Subnet Mask: Enter the Primary and Secondary DNS Server Addresses (Static PPTP only).

PPTP Gateway: Enter the Gateway IP Address provided by your ISP.

PPTP Server IP: Enter the Server IP provided by your ISP (optional).

INTERNET CONNECTION TYPE

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is : PPTP (Username / Password) ▾

ADVANCED DNS SERVICE

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

PPTP INTERNET CONNECTION TYPE

Enter the information provided by your Internet Service Provider (ISP).

Address Mode : Dynamic IP (DHCP) Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

PPTP Server IP Address :

Username :

Password :

Verify Password :

Reconnect Mode : Always on On demand Manual

Maximum Idle Time : (minutes, 0=infinite)

Primary DNS Address :

Secondary DNS Address :

MTU : (bytes) MTU default = 1400

MAC Address :

Username: Enter your PPTP username.

Password: Enter your PPTP password and then retype the password in the next box.

Reconnect

Mode: Select either **Always-on, On-Demand** or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable **Auto-reconnect**.

DNS Servers: The DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup

L2TP

Choose **L2TP (Layer 2 Tunneling Protocol)** if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

My Internet Connection: Select **L2TP (Username/Password)** from the drop-down menu.

Enable Advanced DNS Service: *Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.*

Disclaimer: *D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.*

Enable True Gigabit Routing Connectivity: Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

L2TP IP Address: Enter the L2TP IP address supplied by your ISP (Static only).

L2TP Subnet

Mask: Enter the Subnet Mask supplied by your ISP (Static only).

L2TP Gateway: Enter the Gateway IP Address provided by your ISP.

INTERNET CONNECTION TYPE

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is : L2TP (Username / Password) ▾

ADVANCED DNS SERVICE

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

L2TP INTERNET CONNECTION TYPE

Enter the information provided by your Internet Service Provider (ISP).

Address Mode : Dynamic IP (DHCP) Static IP

L2TP :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address :

Username :

Password :

Verify Password :

Reconnect Mode : Always on On demand Manual

Maximum Idle Time : (minutes, 0=infinite)

Primary DNS Address :

Secondary DNS Address :

MTU : (bytes)MTU default = 1400

MAC Address :

Clone Your PC's MAC Address

L2TP Server IP: Enter the Server IP provided by your ISP (optional).

Username: Enter your L2TP username.

Password: Enter your L2TP password and then retype the password in the next box.

Reconnect

Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable **Auto-reconnect**.

DNS Servers: Enter the Primary and Secondary DNS Server Addresses (Static L2TP only).

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

Clone MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Wireless Settings

If you want to configure the *Wireless Settings* on your router using the wizard, click **Wireless Security Setup Wizard** and refer to page 41.

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS) and refer to page 43.

If you want to manually configure the wireless settings on your router click **Manual Wireless Network Setup** and refer to the next page.

D-Link

DIR-855L //

SETUP ADVANCED TOOLS STATUS SUPPORT

INTERNET

WIRELESS SETTINGS

NETWORK SETTINGS

MEDIA SERVER

STORAGE

IPV6

MYDLINK SETTING

WIRELESS SETTINGS

The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.

Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

WIRELESS NETWORK SETUP WIZARD

This wizard is designed to assist you in your Wi-Fi network setup. It will guide you through step-by-step instructions on how to set up your Wi-Fi network and how to make it secure.

Wireless Network Setup Wizard

Note : Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.

ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD

This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.

Add Wireless Device with WPS

MANUAL WIRELESS NETWORK SETUP

If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.

Manual Wireless Network Setup

Helpful Hints ...

If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Network Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running.

If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Network Setup** to input all the settings manually.

[More...](#)

Manual Wireless Settings

802.11n/g (2.4GHz)

Enable Wireless: Check the box to enable the *Wireless* function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Any schedule you create will be available in the drop-down menu. Click **Add New** to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:

802.11b Only - Select only if all of your wireless clients are 802.11b.

802.11g Only - Select only if all of your wireless clients are 802.11g.

802.11n Only - Select only if all of your wireless clients are 802.11n.

Mixed 802.11g and 802.11b - Select if you are using both 802.11g and 802.11b wireless clients.

Mixed 802.11n and 802.11g - Select if you are using both 802.11n and 802.11g wireless clients.

Mixed 802.11n, 11g, and 11b - Select if you are using a mix of 802.11n, 802.11g, and 802.11b wireless clients.

Enable Auto Channel

Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-855L to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-855L. By default the channel is set to six (6). The channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

Channel Width: Select the Channel Width:

Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.

20MHz - Select if you are not using any 802.11n wireless clients.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-855L. If **Invisible** is selected, the SSID of the DIR-855L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-855L in order to connect to it.

Wireless Security: Refer to page 40 for more information regarding wireless security.

WIRELESS NETWORK SETTINGS

Wireless Band : 2.4GHz Band

Enable Wireless : Always New Schedule

Wireless Network Name : (Also called the SSID)

802.11 Mode : Mixed 802.11n, 802.11g and 802.11b

Enable Auto Channel Scan :

Wireless Channel : 2.437 GHz - CH 6

Channel Width : Auto 20/40 MHz

Visibility Status : Visible Invisible

802.11n/a (5GHz)

Enable Wireless: Check the box to enable the *Wireless* function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Any schedule you create will be available in the drop-down menu. Click **New Schedule** to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11a Only - Select if all of your wireless clients are 802.11a.
802.11n Only - Select only if all of your wireless clients are 802.11n.
Mixed 802.11n and 802.11a - Select if you are using both 802.11n and 802.11a wireless clients.

Enable Auto Channel Scan

Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-855L to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-855L. By default the channel is set to six (6). The channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

Channel Width: Select the Channel Width:
Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20MHz - Select if you are not using any 802.11n wireless clients.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-855L. If **Invisible** is selected, the SSID of the DIR-855L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-855L in order to connect to it.

Wireless Security: Refer to the next page for more information regarding wireless security.

WIRELESS NETWORK SETTINGS

Wireless Band : 5GHz Band

Enable Wireless : Always New Schedule

Wireless Network Name : (Also called the SSID)

802.11 Mode :

Enable Auto Channel Scan :

Wireless Channel :

Channel Width :

Visibility Status : Visible Invisible

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-855L offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WPA?

WPA (Wi-Fi Protected Access), is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The two major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Wireless Security Setup Wizard

To run the *Security Setup Wizard*, click on **Setup** at the top and then click **Wireless Network Setup Wizard**.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various settings categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, STORAGE, IPV6, and MYDLINK SETTING. The main content area is titled 'WIRELESS SETTINGS' and contains three sections:

- WIRELESS NETWORK SETUP WIZARD**: A section with a button labeled 'Wireless Network Setup Wizard'. It includes a note: 'Note : Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.'
- ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD**: A section with a button labeled 'Add Wireless Device with WPS'.
- MANUAL WIRELESS NETWORK SETUP**: A section with a button labeled 'Manual Wireless Network Setup'.

On the right side, there is a 'Helpful Hints ...' section with text: 'If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Network Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running. If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Network Setup** to input all the settings manually. More...

Type your desired wireless network name (SSID).

Automatically: Select this option to automatically generate the router's network key and click **Next**.

Manually: Select this option to manually enter your network key and click **Next**.

The screenshot shows the 'STEP 1 : WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD' screen. It prompts the user to 'Give your network a name, using up to 32 characters.' There are two input fields for the network name:

- Wi-Fi Network Name (SSID) 2.4GHz Band :**
- Manually set 5GHz band Network Name (SSID)**
- Wi-Fi Network Name (SSID) 5GHz Band :**

There are two radio button options for the network key:

- Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)**
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.
- Manually assign a network key**
Use this options if you prefer to create our own key.

A note at the bottom states: **Note: All D-Link wireless adapters currently support WPA.** At the bottom right, there are 'Next' and 'Cancel' buttons.

If you selected **Automatically**, the summary window will display your settings. Write down the security key and enter this on your wireless clients. Click **Save** to save your settings.

SETUP COMPLETE!

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

2.4GHz Band Wireless Network
Name (SSID) : dlink-0000
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key : 98a9546dc9f035e74406a4ca434a4fa276c0009ba71c66399a1c1849371bd718

5GHz Band Wireless Network
Name (SSID) : dlink-0002-media
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key : d3696760070a0d143cbc3ee3e7b4b2b81a46b9af4e9d21705fae5abcd86ed845

If you selected **Manually**, the following screen will appear. Create a passphrase for your security password. Click **Next** to continue.

STEP 2 SET YOUR WIRELESS SECURITY PASSWORD

You have selected your security level - you will need to set a wireless security password.

The WPA (Wi-Fi Protected Access) key must meet one of following guidelines:

- Between 8 and 63 characters (A longer WPA key is more secure than a short one)
- Exactly 64 characters using 0-9 and A-F

Use the same Wireless Security Password on both 2.4GHz and 5GHz band.

2.4GHz Band Wireless Security Password :

5GHz Band Wireless Security Password :

Note: You will need to enter the same password as keyed in this step into your wireless clients in order to enable proper wireless communication.

Add Wireless Device with WPS Wizard

From the **Setup > Wireless Settings** screen, click **Add Wireless Device with WPS**.

ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD

This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.

Add Wireless Device with WPS

Select **Auto** to add a wireless client using *WPS (Wi-Fi Protected Setup)* and then click **Next**. Skip to the next page.

STEP 1: SELECT CONFIGURATION METHOD FOR YOUR WIRELESS NETWORK

Please select one of following configuration methods and click next to continue.

Auto Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)

Manual Select this option will display the current wireless settings for you to configure the wireless device manually.

Next

Cancel

If you select **Manual**, a settings summary screen will appear. Write down the security key and enter this on your wireless clients. Click **OK** to finish.

STEP 2: CONNECT YOUR WIRELESS DEVICE

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

2.4GHz Band SSID: **dlink-0000**
 Security Mode: **Auto (WPA or WPA2) - PSK**
 Cipher Type: **BOTH**
 Pre-shared Key: **11111111**

SSID: **dlink_guest**
 Security Mode: **none**

5GHz Band SSID: **dlink-0002-media**
 Security Mode: **Auto (WPA or WPA2) - PSK**
 Cipher Type: **BOTH**
 Pre-shared Key: **11111111**

SSID: **dlink_media_guest**
 Security Mode: **none**

PIN: Select this option to use *PIN* method. In order to use this method you must know the wireless client's 8 digit PIN and click **Connect**.

PBC: Select this option to use *PBC (Push Button)* method to add a wireless client. Click **Connect**.

Once you click **Connect**, you will have a 120 second time limit to apply the settings to your wireless client(s) and successfully establish a connection.

ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD

There are two ways to add wireless device to your wireless network

- PIN (Personal Identification Number)
- PBC (Push Button Configuration)

PIN :

please enter the PIN from your wireless device and click the below "Connect" Button

PBC

please press the push button on your wireless device and click the below "Connect" Button within 120 seconds

ADD WIRELESS DEVICE WITH WPS

Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network within **115** seconds ...

WPA/WPA2-Personal (PSK)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.
2. Next to *Security Mode*, select **WPA-Personal**.
3. Next to *WPA Mode*, select **Auto, WPA2 Only, or WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.
4. Next to *Cypher Type*, select **TKIP and AES, TKIP, or AES**.
5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).
6. Next to *Pre-Shared Key*, enter a key (passphrase). The key is entered as a pass-phrase in ASCII format at both ends of the wireless connection. The pass-phrase must be between 8-63 characters.
7. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the router.

WIRELESS SECURITY MODE

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.

Security Mode :

WPA

Use **WPA or WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use **WPA2 Only** security mode (or in other words AES cipher).

WPA Mode :

Cipher Type :

Group Key Update Interval : (seconds)

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

Configure WPA/WPA2-Enterprise (RADIUS)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.
2. Next to *Security Mode*, select **WPA-Enterprise**.
3. Next to *WPA Mode*, select **Auto, WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.
4. Next to *Cypher Type*, select **TKIP and AES, TKIP**, or **AES**.
5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).
6. Next to *Authentication Timeout*, enter the amount of time before a client is required to re-authenticate (60 minutes is default).
7. Next to *RADIUS Server IP Address* enter the IP address of your RADIUS server.

WIRELESS SECURITY MODE

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.

Security Mode : WPA-Enterprise ▾

WPA

Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use **WPA2 Only** security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2) ▾

Cipher Type : TKIP and AES ▾

Group Key Update Interval : 3600 (seconds)

EAP (802.1X)

When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server. MAC Address Authentication

Authentication Timeout : 60 (minutes)

RADIUS server IP Address : 0.0.0.0

RADIUS server Port : 1812

RADIUS server Shared Secret :

Second MAC Address Authentication :

Advanced >>

8. Next to *RADIUS Server Port*, enter the port you are using with your RADIUS server. 1812 is the default port.
9. Next to *RADIUS Server Shared Secret*, enter the security key.
10. If the *MAC Address Authentication* box is selected then the user will need to connect from the same computer whenever logging into the wireless network.
11. Click **Advanced** to enter settings for a secondary RADIUS Server.
12. Click **Apply Settings** to save your settings.

EAP (802.1X)

When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server. **MAC Address Authentication**

Authentication Timeout : (minutes)

RADIUS server IP Address :

RADIUS server Port :

RADIUS server Shared Secret :

Second MAC Address Authentication :

<<Advanced

Optional backup RADIUS server :

Second RADIUS server IP Address :

Second RADIUS server Port :

Second RADIUS server Shared Secret :

Second MAC Address Authentication :

Network Settings

Network Settings will allow you to change the local network settings of the router and to configure the DHCP settings.

Router Settings

Router IP Address: Enter the IP address of the router. The default IP address is 192.168.0.1.

If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

Subnet Mask: Enter the Subnet Mask. The default subnet mask is 255.255.255.0.

Device Name: Enter a name for the router.

Local Domain: Enter the Domain name (Optional).

Enable DNS Relay: Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'D-Link', 'DIR-855L', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. A left sidebar lists menu items: 'INTERNET', 'WIRELESS SETTINGS', 'NETWORK SETTINGS', 'MEDIA SERVER', 'STORAGE', 'IPV6', and 'MYDLINK SETTING'. The main content area is divided into two sections:

- NETWORK SETTINGS:** Contains a description of the section, a 'Save Settings' button, and a 'Don't Save Settings' button.
- ROUTER SETTINGS:** Contains a description and the following configuration fields:
 - Router IP Address : 192.168.0.1
 - Subnet Mask : 255.255.255.0
 - Device Name : dlinkrouter
 - Local Domain Name : [empty field]
 - Enable DNS Relay :

On the right side, there is a 'Helpful Hints...' section with two paragraphs of text and a 'More...' link.

DHCP Server Settings

DHCP stands for *Dynamic Host Control Protocol*. The DIR-855L has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-855L. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

Enable DHCP Check this box to enable the DHCP server on your router.
Server: Uncheck to disable this function.

DHCP IP Address Range: Enter the starting and ending IP addresses for the DHCP server's IP assignment.

Note: *If you statically (manually) assign IP addresses to your computers or devices, make sure the IP addresses are outside of this range or you may have an IP conflict.*

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes.

Always Broadcast: Enable this feature to broadcast your networks DHCP server to LAN/WLAN clients.

NetBIOS Announcement: NetBIOS allows LAN hosts to discover all other computers within the network, enable this feature to allow the DHCP Server to offer NetBIOS configuration settings.

Learn NetBIOS

from WAN: Enable this feature to allow WINS information to be learned from the WAN side, disable to allow manual configuration.

NetBIOS Scope: This feature allows the configuration of a NetBIOS 'domain' name under which network hosts operate. This setting has no effect if the 'Learn NetBIOS information from WAN' is activated.

DHCP SERVER SETTINGS

Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network.

Enable DHCP Server :

DHCP IP Address Range : to

DHCP Lease Time : (minutes)

Always broadcast : (compatibility for some DHCP Clients)

NetBIOS announcement :

Learn NetBIOS from WAN :

NetBIOS Scope : (Optional)

NetBIOS node type :
 Broadcast only (use when no WINS servers configured)
 Point-to-Point (no broadcast)
 Mixed-mode (Broadcast then Point-to-Point)
 Hybrid (Point-to-Point then Broadcast)

Primary WINS IP Address :

Secondary WINS IP Address :

NetBIOS Node: Select the type of NetBIOS node; **Broadcast only, Point-to-Point, Mixed-mode** and **Hybrid**.

WINS IP

Address: Enter your WINS Server IP address(es).

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a *DHCP reservation*. The router will assign the IP address only to that computer or device.

Note: This IP address must be within the DHCP IP Address Range.

Enable: Check this box to enable the reservation.

Computer Name: Enter the computer name or select from the drop-down menu and click <<.

IP Address: Enter the IP address you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

MAC Address: Enter the MAC address of the computer or device.

Copy Your PC's MAC Address: If you want to assign an IP address to the computer you are currently on, click this button to populate the fields.

Save: Click **Save** to save your entry. You must click **Save Settings** at the top to activate your reservations.

DHCP Reservations List

DHCP Reservations List: Displays any reservation entries. Displays the host name (name of your computer or device), MAC Address and IP address.

Enable: Check to enable the reservation.

Edit: Click the **Edit** icon to make changes to the reservation entry.

Delete: Click to remove the reservation from the list.

ADD DHCP RESERVATION

Enable :

Computer Name : << Computer Name ▾

IP Address :

MAC Address :

Copy Your PC's MAC Address

Save Clear

DHCP RESERVATIONS LIST

Enable	Host Name	MAC Address	IP Address

NUMBER OF DYNAMIC DHCP CLIENTS : 0

MAC Address	Assigned IP	Hostname	Expires


Media Server

This feature allows you to share music, pictures and videos from a USB external drive/thumb drive and/or SD card with any device connected to your network.

Enable Media Server: Check this box to enable the media server feature.

Media Server

Name: Enter the media server's name.



The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER (highlighted), STORAGE, IPV6, and MYDLINK SETTING. The main content area is titled 'MEDIA SERVER' and contains the following text: 'If you enable to share media with devices, any computer or device that connects to your network can play your shared music, pictures and videos.' Below this is a note: 'Note: The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.' There are two buttons: 'Save Settings' and 'Don't Save Settings'. At the bottom, there is a section for 'MEDIA SERVER' with a checked checkbox for 'Enable Media Server' and a text input field for 'Media Server Name' containing the value 'DIR-855L'. A 'Helpful Hints...' link is visible on the right side.

Storage

This page will allow you to access files from a USB external hard drive or thumb drive that is plugged into the router from your local network or from the Internet, using either a web browser or an app for your smartphone or tablet. You can create users to be allowed to access these files. Please refer to the next page for step-by-step setup instructions.

Enable SharePort Check to enable sharing files on your USB storage device that **Web Access:** is plugged in your router. This option is disabled by default.

HTTP Access Port: Enter a port (8181 is default). You will have to enter this port in the URL when connecting to the shared files. For example: (<http://dlinkrouter.local:8181>).

HTTPS Access Port: Enter a port (4433 is default). You will have to enter this port in the URL when connecting to the shared files. For example: (<https://dlinkrouter.local:4433>).

User Name: To create a new user, enter a user name.

Password: Enter a password for this account.

Verify Password: Re-enter the password. Click **Add/Edit** to create the user.

User List: Displays all user accounts. The **Admin** and **Guest** accounts are built-in to the router.

Number of

Devices: Displays the USB device plugged into the router.

Storage Device Link: Displays the URL(s) to enter in your web browser to access your shared files on a USB thumb drive or external hard drive connected to your router.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various settings categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, STORAGE, IPV6, and MYLINK SETTING. The main content area is titled 'STORAGE' and contains the following sections:

- STORAGE:** A text box explaining Web File Access and 'Enable Web File Access' checkbox. Below it are 'Save Settings' and 'Don't Save Settings' buttons.
- SHAREPORT WEB ACCESS:** A section with 'Enable SharePort Web Access' checked, and input fields for 'HTTP Access Port' (8181) and 'HTTPS Access Port' (4433). There is also an 'Allow Remote Access' checkbox.
- 10 -- USER CREATION:** A section with input fields for 'User Name', 'Password', and 'Verify Password', along with 'Add/Edit' and 'Delete' buttons.
- USER LIST:** A table showing user accounts with columns for No., User Name, Access Path, and Permission.

No.	User Name	Access Path	Permission
1	admin	/	Read/Write
2	guest	None	Read Only
- NUMBER OF DEVICES : 0:** A section with a table showing 'Device', 'Total Space', and 'Free Space'.
- STORAGE DEVICE LINK:** A section with a text box stating: 'You can use this link to connect to the drive remotely after logging with a user account.'

On the right side of the interface, there is a 'Helpful Hints...' section with a small text box providing additional information about USB storage devices.

Access Files from the Internet

If you would like Internet access to your files that are on your USB thumb drive or external hard drive that is connected to your router, follow the steps below:

Step 1 - Enable SharePort Web Access

Check the **Enable SharePort Web Access** checkbox to enable. Enter the port(s) you want to use for HTTP and HTTPS. The default for HTTP is 8181 and HTTPS is 4433.

Step 2 - Create a User Account

Under *User Creation*, enter a username and password, and then click **Add/Edit**.

Step 3 - Configure your Access Path

Under *User List*, click the **Modify** icon for the user you just created. Here you can browse to the folder on your USB storage device you want to assign the Access Path to.

Step 4 - Save Settings

If you want to add more users, repeat steps 3 and 4. Once you are finished, click the **Save Settings** button at the top to save your settings.

Note: The URL(s) you can use to connect to the USB drive will be displayed under the SharePort Web Access Link (at the bottom). Also, if you selected **HTTPS**, you must type in **HTTPS://** instead of **HTTP://** to get a secure connection.

For example, if you selected **HTTPS** and changed the port to 3200, and your WAN IP address of the router is 1.2.3.4, then you would enter **HTTPS://1.2.3.4:3200** to connect.

SHAREPORT WEB ACCESS

Enable SharePort Web Access :

HTTP Access Port :

HTTPS Access Port :

Allow Remote Access :

10 -- USER CREATION

User Name : << User Name ▾

Password :

Verify Password :

USER LIST

: Modify : Delete

No.	User Name	Access Path	Permission
1	admin	/	Read/Write
2	guest	None	Read Only

NUMBER OF DEVICES : 1

Device	Total Space	Free Space
Drive(A0)	477.87 MB	1.75 MB

STORAGE DEVICE LINK

You can use this link to connect to the drive remotely after logging with a user account.

<http://192.168.0.111:8181/>

IPv6

On this page, the user can configure the *IPv6 Connection* type. There are two ways to set up the IPv6 Internet connection. You can use the Web-based *IPv6 Internet Connection Setup Wizard* or you can manually configure the connection.

For the beginner user that has not configured a router before, click on the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.

For the advanced user that has configured a router before, click on the **Manual IPv6 Internet Connection Setup** button to input all the settings manually.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various settings categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, STORAGE, IPV6, and MYLINK SETTINGS. The main content area is titled "IPV6 INTERNET CONNECTION" and contains three sections:

- IPV6 INTERNET CONNECTION**: A general overview section stating there are two ways to set up the connection: using the Web-based IPv6 Internet Connection Setup Wizard or manually configuring the connection.
- IPV6 INTERNET CONNECTION SETUP WIZARD**: A section for users who prefer a guided setup. It includes a button labeled "IPv6 Internet Connection Setup Wizard" and a note advising users to follow the Quick Installation Guide.
- MANUAL IPV6 LOCAL CONNECTIVITY SETTINGS**: A section for users who want to configure local connectivity. It includes a button labeled "IPv6 Local Connectivity Settings".
- MANUAL IPV6 INTERNET CONNECTION SETUP**: A section for users who want to manually configure the Internet settings. It includes a button labeled "Manual IPv6 Internet Connection Setup".

On the right side of the interface, there is a "Helpful Hints..." section with text providing additional guidance for both beginner and advanced users, and a "More..." link.

To configure the IPv6 local settings, click on the **IPv6 Local Connectivity Setup** button.

The screenshot shows the "IPV6 LOCAL CONNECTIVITY SETTINGS" section. It contains the following text: "Use this section to configure Unique Local IPv6 Unicast Addresses(ULA) settings for your router. ULA is intended for local communications and not expected to be routable on the global Internet." Below the text are two buttons: "Save Settings" and "Don't Save Settings".

The screenshot shows the "IPV6 ULA SETTINGS" section. It includes the following configuration options:

- Enable ULA**:
- Use Default ULA Prefix**:
- ULA Prefix**: /64

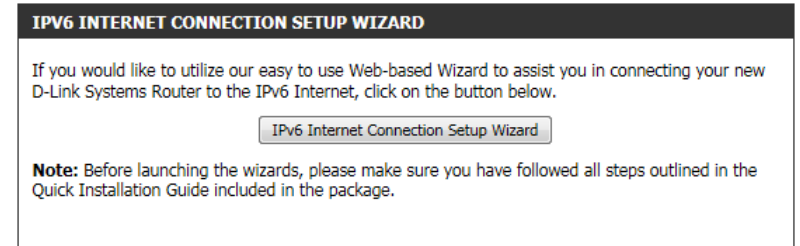
Below this section is the "CURRENT IPV6 ULA SETTINGS" section, which displays the following information:

- Current ULA Prefix**:
- LAN IPv6 ULA**:

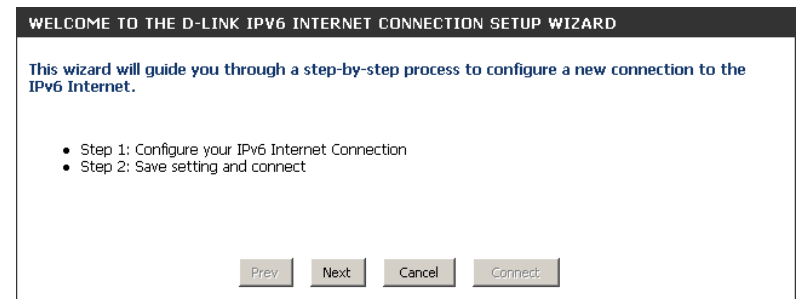
IPv6 Internet Connection Setup Wizard

On this page, the user can configure the IPv6 Connection type using the *IPv6 Internet Connection Setup Wizard*.

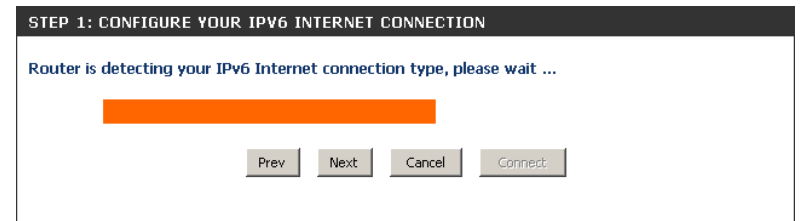
Click the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.



Click **Next** to continue to the next page. Click **Cancel** to discard the changes made and return to the main page.



The router will try to detect whether its possible to obtain the IPv6 Internet connection type automatically. If this succeeds then the user will be guided through the input of the appropriate parameters for the connection type found.



However, if the automatic detection fails, the user will be prompted to either **Try again** or to click on the **Guide me through the IPv6 settings** button to initiate the manual continual of the wizard.

There are several connection types to choose from. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: *If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled. The three options available on this page are IPv6 over PPPoE, Static IPv6 address and Route and Tunneling Connection.*

Choose the required *IPv6 Internet Connection* type and click on the **Next** button to continue.

Click on the **Prev** button to return to the previous page.

Click on the **Cancel** button to discard all the changes made and return to the main page.

STEP 1: CONFIGURE YOUR IPV6 INTERNET CONNECTION

Router is unable detect your IPv6 Internet connection type

Cancel

Try again

Guide me through the IPv6 setting

STEP 1: CONFIGURE YOUR IPV6 INTERNET CONNECTION

Please select your IPv6 Internet Connection type

IPv6 over PPPoE

Choose this option if your IPv6 Internet connection requires a username and password to get online. Most DSL modems use this type of connection.

Static IPv6 address and Route

Choose this option if your Internet Service Provider (ISP) provided you with IPv6 address information that has to be manually configured.

Tunneling Connection (6rd)

Choose this option if your Internet Service Provider (ISP) provided you a IPv6 Internet connection by using 6rd automatic tunneling mechanism.

Prev

Next

Cancel

Connect

IPv6 over PPPoE

After selecting the *IPv6 over PPPoE* option, the user will be able to configure the IPv6 Internet connection, which requires a username and password to get online. Most DSL modems use this type of connection.

The following parameters will be available for configuration:

PPPoE Session: Select the PPPoE Session type. This option will state that this connection shares its information with the already configured IPv6 PPPoE connection, or the user can create a new PPPoE connection here.

Username: Enter the PPPoE username. If you do not know your username, please contact your ISP.

Password: Enter the PPPoE password. If you do not know your password, please contact your ISP.

Verify Password: Re-enter the PPPoE password.

Service Name: Enter the service name for this connection. (This is optional.)

SET USERNAME AND PASSWORD CONNECTION (PPPOE)

To set up this connection you will need to have a Username and Password from your IPv6 Internet Service Provider. If you do not have this information, please contact your ISP.

PPPoE Session: Share with IPv4 Create a new session

Username :

Password :

Verify Password :

Service Name : (Optional)

Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.

Prev Next Cancel Connect

Static IPv6 Address Connection

Use *Static IPv6 Address Connection* when your ISP provides you with a set IPv6 addresses that does not change. The IPv6 information is manually entered in your IPv6 configuration settings. You must enter the IPv6 address, Subnet Prefix Length, Default Gateway, Primary DNS Server and Secondary DNS Server. Your ISP provides you with all of this information.

Use Link-Local The *Link-local address* is used by nodes and routers when communicating with neighboring nodes on the same link. This mode enables IPv6-capable devices to communicate with each other on the LAN side.

Address:

IPv6 Address: Enter the WAN IPv6 address for the router here.

Subnet Prefix

Length: Enter the WAN subnet prefix length value used here.

Default Gateway: Enter the WAN default gateway IPv6 address used here.

Primary DNS

Address: Enter the WAN primary DNS Server address used here.

Secondary DNS

Address: Enter the WAN secondary DNS Server address used here.

LAN IPv6 Address: These are the settings of the LAN (Local Area Network) IPv6 interface for the router. The router's LAN IPv6 Address configuration is based on the IPv6 address and subnet assigned by your ISP. (A subnet with prefix /64 is supported in LAN.)

SET STATIC IPV6 ADDRESS CONNECTION

To set up this connection you will need to have a complete list of IPv6 information provided by your IPv6 Internet Service Provider. If you have a Static IPv6 connection and do not have this information, please contact your ISP.

Use Link-Local Address :

IPv6 Address :

Subnet Prefix Length :

Default Gateway :

Primary DNS Address :

Secondary DNS Address :

LAN IPv6 Address : /64

Tunneling Connection (6rd)

After selecting the *Tunneling Connection (6rd)* option, the user can configure the IPv6 6rd connection settings.

The following parameters will be available for configuration:

6rd IPv6 Prefix: Enter the 6rd IPv6 address and prefix value used here.

IPv4 Address: Enter the IPv4 address used here.

Mask Length: Enter the IPv4 mask length used here.

Assigned IPv6 Prefix: Displays the IPv6 assigned prefix value here.

6rd Border Relay IPv4

Address: Enter the 6rd border relay IPv4 address used here.

IPv6 DNS Server: Enter the primary DNS Server address used here.

SET UP 6RD TUNNELING CONNECTION

To set up this 6rd tunneling connection you will need to have the following information from your IPv6 Internet Service Provider. If you do not have this information, please contact your ISP.

6rd IPv6 Prefix : / 32

IPv4 Address : 192.168.0.111 Mask Length : 0

Assign IPv6 Prefix : None

Tunnel Link-Local Address : FE80::C0A8:006F/64

6rd Border Relay IPv4 Address :

IPv6 DNS Server :

Prev Next Cancel Connect

The *IPv6 Internet Connection Setup Wizard* is complete.

Click on the **Connect** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.

SETUP COMPLETE!

The IPv6 Internet Connection Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.

Prev Next Cancel Connect

IPv6 Manual Setup

There are several connection types to choose from: **Auto Detection**, **Static IPv6**, **Autoconfiguration (SLAAC/DHCPv6)**, **PPPoE**, **IPv6 in IPv4 Tunnel**, **6to4**, **6rd** and **Link-local**. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

If using the **PPPoE** option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled.

Auto Detection

Select **Auto Detection** to have the router detect and automatically configure your IPv6 setting from your ISP.

IPv6 CONNECTION TYPE
<p>Choose the mode to be used by the router to the IPv6 Internet.</p> <p>My IPv6 Connection is : <input type="text" value="Auto Detection"/></p>
IPv6 DNS SETTINGS
<p>Obtain a DNS server address automatically or enter a specific DNS server address.</p> <p> <input checked="" type="radio"/> Obtain a DNS server address automatically <input type="radio"/> Use the following DNS address </p> <p>Primary DNS Server : <input type="text"/></p> <p>Secondary DNS Server : <input type="text"/></p>
LAN IPv6 ADDRESS SETTINGS
<p>Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.</p> <p>LAN IPv6 Address : <input type="text"/></p> <p>LAN IPv6 Link-Local Address : FE80::218:E7FF:FE00:0/64</p>
ADDRESS AUTOCONFIGURATION SETTINGS
<p>Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.</p> <p> Enable automatic IPv6 address assignment : <input checked="" type="checkbox"/> Enable Automatic DHCP-PD in LAN : <input checked="" type="checkbox"/> Autoconfiguration Type : <input type="text" value="SLAAC + Stateless DHCPv6"/> Router Advertisement Lifetime: <input type="text" value="1440"/> (minutes) </p>

Static IPv6

My IPv6 Connection: Select **Static IPv6** from the drop-down menu.

WAN IPv6 Address Settings: Enter the address settings supplied by your Internet provider (ISP).

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable

Autoconfiguration: Check to enable the *Autoconfiguration* feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS**, or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	Static IPv6
WAN IPv6 ADDRESS SETTINGS	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
Use Link-Local Address :	<input checked="" type="checkbox"/>
IPv6 Address :	FE80::218:E7FF:FE00:1
Subnet Prefix Length :	64
Default Gateway :	
Primary DNS Server :	
Secondary DNS Server :	
LAN IPv6 ADDRESS SETTINGS	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
LAN IPv6 Address :	/64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE00:0/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime:	1440 (minutes)

Autoconfiguration

My IPv6 Connection: Select **Autoconfiguration (Stateless/DHCPv6)** from the drop-down menu.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS

Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable

Autoconfiguration: Check to enable the *Autoconfiguration* feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS**, or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Enter the start IPv6 Address for the DHCPv6 range for your **Start:** local computers.

IPv6 Address Range Enter the end IPv6 Address for the DHCPv6 range for your **End:** local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).

IPv6 CONNECTION TYPE
<p>Choose the mode to be used by the router to the IPv6 Internet.</p> <p>My IPv6 Connection is : <input type="text" value="Autoconfiguration (SLAAC/DHCPv6)"/></p>
IPv6 DNS SETTINGS
<p>Obtain a DNS server address automatically or enter a specific DNS server address.</p> <p> <input checked="" type="radio"/> Obtain a DNS server address automatically <input type="radio"/> Use the following DNS address </p> <p>Primary DNS Server : <input type="text"/></p> <p>Secondary DNS Server : <input type="text"/></p>
LAN IPv6 ADDRESS SETTINGS
<p>Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.</p> <p> Enable DHCP-PD : <input checked="" type="checkbox"/> LAN IPv6 Address : <input type="text"/> /64 LAN IPv6 Link-Local Address : FE80::218:E7FF:FE00:0/64 </p>
ADDRESS AUTOCONFIGURATION SETTINGS
<p>Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.</p> <p> Enable automatic IPv6 address assignment : <input checked="" type="checkbox"/> Enable Automatic DHCP-PD in LAN : <input checked="" type="checkbox"/> Autoconfiguration Type : <input type="text" value="SLAAC + Stateless DHCPv6"/> Router Advertisement Lifetime : <input type="text" value="1440"/> (minutes) </p>

PPPoE

My IPv6 Connection: Select **PPPoE** from the drop-down menu.

PPPoE: Enter the PPPoE account settings supplied by your Internet provider (ISP).

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnection Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable **Auto-reconnect**.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS

Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable Autoconfiguration: Check to enable the *Autoconfiguration* feature.

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	PPPoE
PPPOE	
Enter the information provided by your Internet Service Provider (ISP).	
PPPoE Session:	<input checked="" type="radio"/> Share with IPv4 <input type="radio"/> Create a new session
Address Mode :	<input checked="" type="radio"/> Dynamic IP <input type="radio"/> Static IP
IP Address :	<input type="text"/>
Username :	<input type="text"/>
Password :	<input type="text"/>
Verify Password :	<input type="text"/>
Service Name :	<input type="text"/> (Optional)
Reconnect Mode :	<input checked="" type="radio"/> Always on <input type="radio"/> On demand <input type="radio"/> Manual
Maximum Idle Time :	5 (minutes, 0=infinite)
MTU :	1492 (bytes)MTU default = 1492
IPv6 DNS SETTINGS	
Obtain a DNS server address automatically or enter a specific DNS server address.	
	<input checked="" type="radio"/> Obtain a DNS server address automatically
	<input type="radio"/> Use the following DNS address
Primary DNS Server :	<input type="text"/>
Secondary DNS Server :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
Enable DHCP-PD :	<input checked="" type="checkbox"/>
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE00:0/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Enable Automatic DHCP-PD in LAN :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + RDNSS
Router Advertisement Lifetime :	1440 (minutes)

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).

IPv6 in IPv4 Tunneling

My IPv6

Connection: Select **IPv6 in IPv4 Tunnel** from the drop-down menu.

IPv6 in IPv4 Tunnel

Settings: Enter the settings supplied by your Internet provider (ISP).

IPv6 DNS Settings: Automatically obtain a DNS server address or enter a specific DNS address.

Enable DHCP-PD: Check to enable the *DHC-PD* feature.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local

Address: Displays the router's LAN Link-Local Address.

Enable Automatic IPv6 Address

Assignment: Check to enable automatic IPv6 address assignment.

Enable Automatic

DHCP-PD in LAN: Check to enable automatic DHCP-PD in LAN.

Autoconfiguration Select **Stateful (DHCPv6)**, **SLAAC + RDNSS**, or **SLAAC + Stateless**
Type: **DHCPv6**.

Router

Advertisement

Lifetime: Enter the Router Advertisement Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	<input type="text" value="IPv6 in IPv4 Tunnel"/>
IPv6 in IPv4 TUNNEL SETTINGS	
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.	
Remote IPv4 Address :	<input type="text"/>
Remote IPv6 Address :	<input type="text"/>
Local IPv4 Address :	192.168.0.111
Local IPv6 Address :	<input type="text"/>
IPv6 DNS SETTINGS	
Obtain a DNS server address automatically or enter a specific DNS server address.	
<input checked="" type="radio"/> Obtain a DNS server address automatically <input type="radio"/> Use the following DNS address	
Primary DNS Server :	<input type="text"/>
Secondary DNS Server :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
Enable DHCP-PD :	<input checked="" type="checkbox"/>
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE00:0/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Enable Automatic DHCP-PD in LAN :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	<input type="text" value="SLAAC + Stateless DHCPv6"/>
Router Advertisement Lifetime :	<input type="text" value="1440"/> (minutes)

6 to 4 Tunneling

My IPv6 Connection: Select **6 to 4** from the drop-down menu.

6 to 4 Settings: Enter the IPv6 settings supplied by your Internet provider (ISP).

Primary/Secondary

DNS Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local

Address: Displays the router's LAN Link-Local Address.

Enable

Autoconfiguration: Check to enable the *Autoconfiguration* feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS**, or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address

Lifetime: Enter the IPv6 Address Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	6to4
6to4 SETTINGS	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
6to4 Address :	2002:C0A8:006F::C0A8:006F
6to4 Relay :	192.88.99.1
Primary DNS Server :	
Secondary DNS Server :	
LAN IPv6 ADDRESS SETTINGS	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
LAN IPv6 Address :	2002:C0A8:006F:0001::1/64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE00:0/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :	1440 (minutes)

6rd

My IPv6 Connection: Select **6rd** from the drop-down menu.

6RD Settings: Enter the address settings supplied by your Internet provider (ISP).

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable

Autoconfiguration: Check to enable the *Autoconfiguration* feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC+RDNSS**, or **SLAAC + Stateless DHCPv6**.

Router Advertisement

Lifetime: Enter the Router Advertisement Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	6rd
6RD SETTINGS	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
Enable Hub and Spoke Mode :	<input checked="" type="checkbox"/>
6rd Configuration :	<input checked="" type="radio"/> 6rd DHCPv4 Option <input type="radio"/> Manual Configuration
6rd IPv6 Prefix :	<input type="text"/> / <input type="text" value="32"/>
IPv4 Address :	192.168.0.111 Mask Length : <input type="text" value="0"/>
Assign IPv6 Prefix :	None
Tunnel Link-Local Address :	FE80::C0A8:006F/64
6rd Border Relay IPv4 Address :	<input type="text"/>
Primary DNS Server :	<input type="text"/>
Secondary DNS Server :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
LAN IPv6 Address :	None
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE00:0/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime:	<input type="text" value="1440"/> (minutes)

Link-Local Connectivity

My IPv6 Connection: Select **Link-Local Only** from the drop-down menu.

LAN IPv6 Address

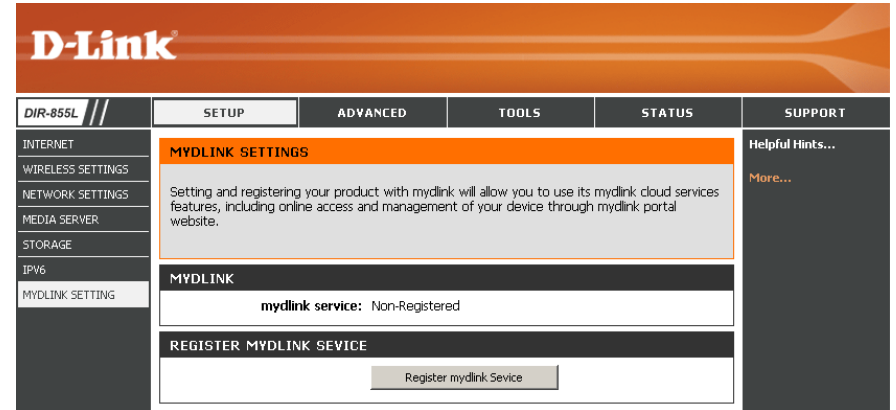
Settings: Displays the IPv6 address of the router.

IPv6 CONNECTION TYPE
<p>Choose the mode to be used by the router to the IPv6 Internet.</p> <p>My IPv6 Connection is : <input type="text" value="Local Connectivity Only"/></p>
LAN IPv6 ADDRESS SETTINGS
<p>LAN IPv6 address for local IPv6 communications.</p> <p>LAN IPv6 Link-Local Address : FE80::218:E7FF:FE00:0/64</p>

mydlink Settings

mydlink Service: Displays whether your device is registered with a mydlink account or not.

Register mydlink Settings: Click to go to the mydlink website to register or edit your settings.



Advanced Virtual Server

This will allow you to open a single port. If you would like to open a range of ports, refer to the next page.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the *Computer Name* drop-down menu. Select your computer and click <<.

Private Port/ Public Port: Enter the port that you want to open. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

Protocol Type: Select **TCP**, **UDP** or **Both** from the drop-down menu.

Schedule: The schedule of time when the **Virtual Server Rule** will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced > Inbound Filter** page.

The screenshot shows the D-Link DIR-855L Advanced Virtual Server configuration page. The page is divided into several sections:

- Navigation:** DIR-855L // SETUP ADVANCED TOOLS STATUS SUPPORT
- VIRTUAL SERVER:** The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers. Buttons: Save Settings, Don't Save Settings.
- 24 --- VIRTUAL SERVERS LIST:** A table with columns: Name, IP Address, Port, Traffic Type, and Schedule. The table contains three rows of predefined server types.
- Helpful Hints...:** Check the Application Name drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field. You can select a computer from the list of DHCP clients in the Computer Name drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port. Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in

Name	IP Address	Port	Traffic Type	Schedule
<< Application Name >>	<< Computer Name >>	Public Port 0	Protocol TCP	Schedule Always
<< Application Name >>	<< Computer Name >>	Private Port 0	Protocol TCP	Inbound Filter Allow All
<< Application Name >>	<< Computer Name >>	Public Port 0	Protocol TCP	Schedule Always
<< Application Name >>	<< Computer Name >>	Private Port 0	Protocol TCP	Inbound Filter Allow All
<< Application Name >>	<< Computer Name >>	Public Port 0	Protocol TCP	Schedule Always
<< Application Name >>	<< Computer Name >>	Private Port 0	Protocol TCP	Inbound Filter Allow All

Port Forwarding

This will allow you to open a single port or a range of ports.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), your computer will be listed in the **Computer Name** drop-down menu. Select your computer and click <<.

TCP/UDP: Enter the TCP and/or UDP port or ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma.

Example: 24,1009,3000-4000

Schedule: The schedule of time when the **Virtual Server Rule** will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced > Inbound Filter** page.

D-Link

DIR-855L // SETUP ADVANCED TOOLS STATUS SUPPORT

PORT FORWARDING

This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689).

Save Settings Don't Save Settings

24 — PORT FORWARDING RULES

	Name	Application Name	Ports to Open	Schedule
<input type="checkbox"/>	IP Address 0.0.0.0	<< Computer Name	TCP 0	Always
<input type="checkbox"/>	IP Address 0.0.0.0	<< Computer Name	UDP 0	Inbound Filter Allow All
<input type="checkbox"/>	Name	<< Application Name	TCP 0	Always
<input type="checkbox"/>	IP Address 0.0.0.0	<< Computer Name	UDP 0	Inbound Filter Allow All
<input type="checkbox"/>	Name	<< Application Name	TCP 0	Always
<input type="checkbox"/>	IP Address 0.0.0.0	<< Computer Name	UDP 0	Inbound Filter Allow All

Helpful Hints...

Check the **Application Name** drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the LAN computer to which you would like to open the specified port.

Select a schedule for when the rule will be enabled. If you do not see the schedule you need in the list of schedules, click the

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). *Application Rules* makes some of these applications work with the DIR-855L. If you need to run applications that require multiple connections, specify the port normally associated with an application in the *Trigger Port* field, select the protocol type as **TCP** or **UDP**, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

The DIR-855L provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

Name: Enter a name for the rule. You may select a pre-defined application from the drop-down menu and click <<.

Trigger: This is the port used to trigger the application. It can be either a single port or a range of ports.

Traffic Type: Select the protocol of the trigger port (**TCP**, **UDP** or **Both**).

Firewall: This is the port number on the Internet side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Traffic Type: Select the protocol of the firewall port (TCP, UDP, or Both).

Schedule: The schedule of time when the **Application Rule** will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section.

D-Link

DIR-855L // SETUP ADVANCED TOOLS STATUS SUPPORT

APPLICATION RULES

This option is used to open single or multiple ports on your router when the router senses data sent to the Internet on a "trigger" port or port range. Special Applications rules apply to all computers on your internal network.

Save Settings Don't Save Settings

24 -- APPLICATION RULES

	Name	Application	Port	Traffic Type	Schedule
<input type="checkbox"/>	<input type="text"/>	<< Application Name >>	Trigger <input type="text"/>	TCP	Always
			Firewall <input type="text"/>	TCP	
<input type="checkbox"/>	<input type="text"/>	<< Application Name >>	Trigger <input type="text"/>	TCP	Always
			Firewall <input type="text"/>	TCP	
<input type="checkbox"/>	<input type="text"/>	<< Application Name >>	Trigger <input type="text"/>	TCP	Always
			Firewall <input type="text"/>	TCP	
<input type="checkbox"/>	<input type="text"/>	<< Application Name >>	Trigger <input type="text"/>	TCP	Always
			Firewall <input type="text"/>	TCP	

Helpful Hints...
Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.
Check the Application Name drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.
Select a schedule for when the service will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -- Schedules screen and create a new schedule.
More...

QoS Engine

The *QoS Engine* helps improve your network gaming performance by prioritizing applications. By default, the *QoS Engine* settings are disabled and application priority is not classified automatically.

Enable Traffic Shaping: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

Automatic Uplink Speed: This option is enabled by default when the **QoS Engine** option is enabled. This option will allow your router to automatically determine the uplink speed of your Internet connection.

Measured Uplink Speed: This displays the detected uplink speed.

Manual Uplink Speed: The speed at which data can be transferred from the router to your ISP. This is determined by your ISP. ISPs often note speed as a download/upload pair. For example, 1.5Mbps/284Kbits. Using this example, you would enter 284. Alternatively you can test your uplink speed with a service such as *speedtest.net*.

Enable QoS Engine: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

Automatic Classification: This option is enabled by default so that your router will automatically determine which programs should have network priority. For best performance, use the Automatic Classification option to automatically set the priority for your applications.

Dynamic Fragmentation: This option should be enabled when you have a slow Internet uplink. It helps to reduce the impact that large low priority network packets can have on more urgent ones.

The screenshot shows the D-Link DIR-855L configuration interface. The main navigation menu includes: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, QoS ENGINE (selected), NETWORK FILTER, ACCESS CONTROL, WEBSITE FILTER, INBOUND FILTER, FIREWALL SETTINGS, ROUTING, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, ADVANCED NETWORK, GUEST ZONE, IPV6 FIREWALL, and IPV6 ROUTING.

QoS ENGINE

Use this section to configure D-Link's QoS Engine powered by QoS Engine™ Technology. This QoS Engine improves your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web. For best performance, use the Automatic Classification option to automatically set the priority for your applications.

Buttons: Save Settings, Don't Save Settings

WAN TRAFFIC SHAPING

Enable Traffic Shaping:

Automatic Uplink Speed:

Measured Uplink Speed: Not Estimated

Manual Uplink Speed: 128 kbps << Select Transmission Rate

QoS ENGINE SETUP

Enable QoS Engine:

Automatic Classification:

Dynamic Fragmentation:

10 -- QoS ENGINE RULES

Name	Priority	Protocol
<input type="checkbox"/>	1 (1..255)	6 << TCP
Local IP Range		Local Port Range
0.0.0.0 to 255.255.255.255		0 to 65535
Remote IP Range		Remote Port Range
0.0.0.0 to 255.255.255.255		0 to 65535
<input type="checkbox"/>	1 (1..255)	6 << TCP
Local IP Range		Local Port Range
0.0.0.0 to 255.255.255.255		0 to 65535
Remote IP Range		Remote Port Range
0.0.0.0 to 255.255.255.255		0 to 65535

Helpful Hints ...

If the **Measured Uplink Speed** is known to be incorrect (that is, it produces suboptimal performance), disable **Automatic Uplink Speed** and enter the **Manual Uplink Speed**. Some experimentation and performance measurement may be required to converge on the optimal value.

[More...](#)

QoS Engine A QoS Engine rule identifies a specific message flow and assigns a priority to that flow. For most applications, automatic classification will be adequate and specific QoS Engine rules will not be required.

The QoS Engine supports overlaps between rules, where more than one rule can match for a specific message flow. If more than one rule is found to match, the rule with the highest priority will be used.

Name: Create a name for the rule that is meaningful to you.

Priority: The priority of the message flow is entered here -- 1 receives the highest priority (most urgent) and 255 receives the lowest priority (least urgent).

Protocol: The protocol used by the messages.

Local IP Range: The rule applies to a flow of messages whose LAN-side IP address falls within the range set here.

Local Port

Range: The rule applies to a flow of messages whose LAN-side port number is within the range set here.

Remote IP

Range: The rule applies to a flow of messages whose WAN-side IP address falls within the range set here.

Remote Port

Range: The rule applies to a flow of messages whose WAN-side port number is within the range set here.

Network Filters

Use *MAC (Media Access Control) Filters* to allow or deny LAN (Local Area Network) computers, by their MAC addresses, from accessing the network. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the router.

Configure MAC Filtering: Select **Turn MAC Filtering Off, Allow MAC addresses listed below**, or **Deny MAC addresses listed below** from the drop-down menu.

MAC Address: Enter the MAC address you would like to filter.

To find the MAC address on a computer, please refer to the *Networking Basics* section in this manual.

DHCP Client: Select a DHCP client from the drop-down menu and click << to copy that MAC Address.

Clear: Click to remove the MAC address.

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MAC ADDRESS FILTER

The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.

Save Settings Don't Save Settings

24 -- MAC FILTERING RULES

Configure MAC Filtering below:

Turn MAC Filtering OFF

MAC Address	<<	DHCP Client List	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear

Helpful Hints...

Create a list of MAC addresses that you would either like to allow or deny access to your network.

Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu, then click the arrow to add that device's MAC address to the list.

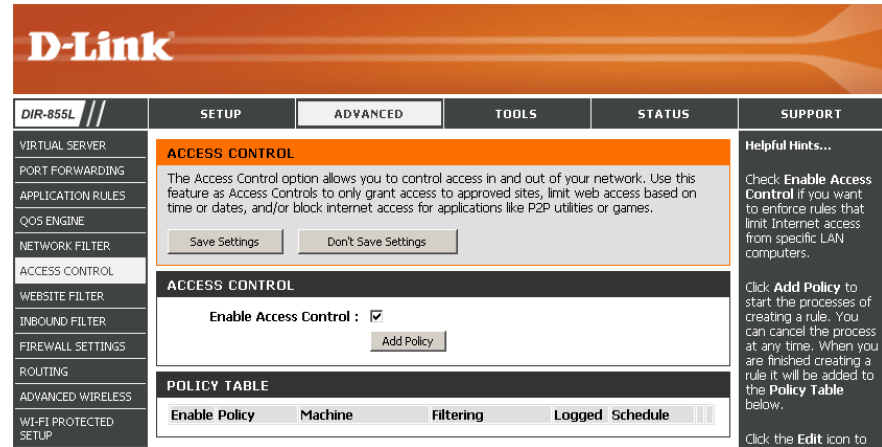
Click the **Clear** button to remove the MAC address from the MAC Filtering list.

More...

Access Control

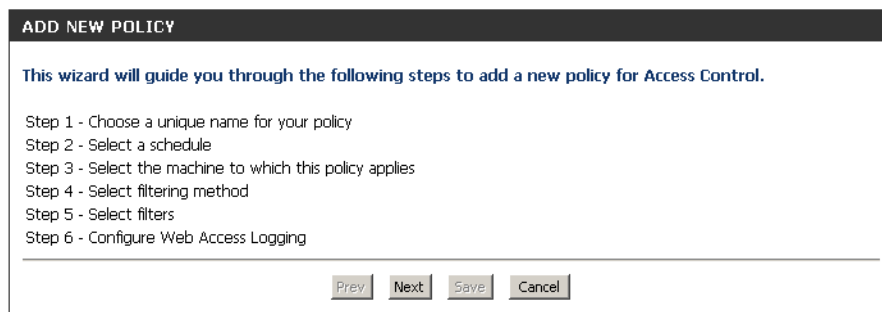
The *Access Control* section allows you to control access in and out of your network. Use this feature as “Parental Controls” to only grant access to approved sites, limit web access based on time or dates, and/or block access from applications like P2P utilities or games.

Add Policy: First, click the **Enable Access Control** box. Next, click the **Add Policy** button to start the *Access Control Wizard*.



Access Control Wizard

Click **Next** to continue with the wizard.



Enter a name for the policy and then click **Next** to continue.

STEP 1: CHOOSE POLICY NAME

Choose a unique name for your policy.

Policy Name :

Select a schedule (i.e., **Always**) from the drop-down menu and then click **Next** to continue.

STEP 2: SELECT SCHEDULE

Choose a schedule to apply to this policy.

Details :

Enter the following information and then click **Next** to continue:

- **Address Type** - Select **IP address**, **MAC address**, or **Other Machines**.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to.
- **Machine Address** - Enter the PC MAC address (i.e., 00:00.00.00.00).

STEP 3: SELECT MACHINE

Select the machine to which this policy applies.

Specify a machine with its IP or MAC address, or select "Other Machines" for machines that do not have a policy.

Address Type : IP MAC Other Machines

IP Address : <<

Machine Address : <<

Machine		
192.168.0.112	<input type="button" value="Add"/>	<input type="button" value="Remove"/>

Select the filtering method and then click **Next** to continue.

Note: If you select the **Apply Advanced Port Filters** option you will be forwarded to the **Add Port Filters Rules** window. Otherwise, you will be advanced to the **Configure Web Access Logging** window (see next page).

STEP 4: SELECT FILTERING METHOD

Select the method for filtering.

Method : Log Web Access Only Block All Access Block Some Access

Apply Web Filter :

Apply Advanced Port Filters :

Enter the rule:

Enable - Check to enable the rule.

Name - Enter a name for your rule.

Dest IP Start - Enter the starting IP address.

Dest IP End - Enter the ending IP address.

Protocol - Select the protocol.

Dest Port Start - Enter the starting port number.

Dest Port End - Enter the ending port number.

STEP 5: PORT FILTER

Add Port Filters Rules.

Specify rules to prohibit access to specific IP addresses and ports.

Enable	Name	Dest IP Start	Dest IP End	Protocol	Dest Port Start	Dest Port End
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	Any	0	65535

Prev Next Save Cancel

To enable web logging, click **Enable**.

Click **Save** to save the access control rule.

STEP 6: CONFIGURE WEB ACCESS LOGGING

Web Access Logging : Disabled
 Enable

Prev Next Save Cancel

Your newly created policy will now show up under *Policy Table*.

ACCESS CONTROL

The Access Control option allows you to control access in and out of your network. Use this feature as Access Controls to only grant access to approved sites, limit web access based on time or dates, and/or block internet access for applications like P2P utilities or games.

Save Settings Don't Save Settings Reboot Now

ACCESS CONTROL

Enable Access Control :

Add Policy

POLICY TABLE

Enable Policy	Machine	Filtering	Logged	Schedule		
<input checked="" type="checkbox"/>	1	192.168.0.25	Block Some Access	No	Always	

Website Filters

Website Filters are used to allow you to set up a list of websites that can be viewed by multiple users through the network. To use this feature, select to **Allow** or **Deny**, enter the domain or website and click **Save Settings**. You must also select **Apply Web Filter** under the *Access Control* section (page 77).

Add Website Select either **DENY computers access to ONLY Filtering Rule: these sites** or **ALLOW computers access to ONLY these sites**.

Website URL/ Domain: Enter the keywords or URLs that you want to allow or block. Click **Save Settings**.

The screenshot displays the D-Link DIR-855L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options, with WEBSITE FILTER selected. The main content area is titled 'WEBSITE FILTER' and contains the following text: 'The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network. To use this feature, you must also select the "Apply Web Filter" checkbox in the Access Control section.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. A section titled '40 - WEBSITE FILTERING RULES' contains a dropdown menu set to 'DENY computers access to ONLY these sites' and a 'Clear the list below...' button. At the bottom, there is a table with the header 'Website URL/Domain' and four rows of input fields. A 'Helpful Hints...' sidebar on the right provides additional information and a 'More...' link.

Inbound Filters

The *Inbound Filter* feature provides an advanced method of controlling data received from the Internet. With this feature, you can configure inbound data filtering rules that control data based on an IP address range. *Inbound Filters* can be used with Virtual Server, Port Forwarding, or Remote Administration features.

Name: Enter a name for the inbound filter rule.

Action: Select **Allow** or **Deny**.

Enable: Check to enable the rule.

Remote IP Start: Enter the starting IP address. Enter 0.0.0.0 if you do not want to specify an IP range.

Remote IP End: Enter the ending IP address. Enter 255.255.255.255 if you do not want to specify and IP range.

Add: Click the **Add** button to apply your settings. You must click **Save Settings** at the top to save the settings.

Inbound Filter Rules List: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options, with 'INBOUND FILTER' selected. The main content area is titled 'INBOUND FILTER' and contains the following text:

The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range.

Inbound Filters can be used for limiting access to a server on your network to a system or group of systems. Filter rules can be used with Virtual Server, Port Forwarding, or Remote Administration features.

The 'ADD INBOUND FILTER RULE' form includes:

- Name:** A text input field.
- Action:** A dropdown menu set to 'Allow'.
- Remote IP Range:** A table with columns for 'Enable', 'Remote IP Start', and 'Remote IP End'. There are seven rows, each with a checkbox, a text input for the start IP (all set to 0.0.0.0), and a text input for the end IP (all set to 255.255.255.255).
- Buttons:** 'Add' and 'Clear' buttons at the bottom of the table.

Below the form is the 'INBOUND FILTER RULES LIST' table, which has columns for 'Name', 'Action', and 'Remote IP Range'. The table is currently empty.

The right sidebar, titled 'Helpful Hints...', contains the following text:

Give each rule a **Name** that is meaningful to you.

Each rule can either **Allow** or **Deny** access from the WAN.

Up to eight ranges of WAN IP addresses can be controlled by each rule. The checkbox by each IP range can be used to disable ranges already defined.

The starting and ending IP addresses are WAN-side address.

Click the **Add** or **Update** button to store a finished rule in the Rules List below.

Click the **Edit** icon in the Rules List to change a rule.

Click the **Delete** icon in the Rules List to permanently remove a rule.

[More...](#)

Firewall Settings

A firewall protects your network from the outside world. The DIR-855L offers a firewall type functionality. The *Stateful Packet Inspection (SPI)* feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. DMZ is short for Demilitarized Zone. This option will expose the chosen computer completely to the outside world.

Enable SPI: *SPI (Stateful Packet Inspection)*, also known as dynamic packet filtering, helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

Anti-Spoof Check: Enable this feature to protect your network from certain kinds of “spoofing” attacks.

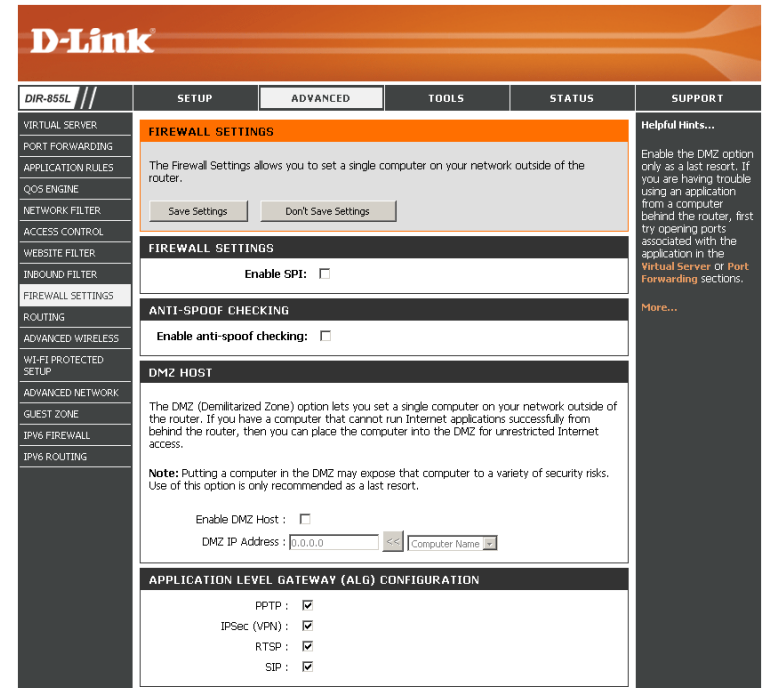
Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: *Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.*

DMZ IP Address: Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains its IP address automatically using DHCP, be sure to make a static reservation on the **Setup > Network Settings** page so that the IP address of the DMZ machine does not change.

PPTP: Allows multiple machines on the LAN to connect to their corporate network using PPTP protocol.

IPSEC (VPN): Allows multiple VPN clients to connect to their corporate network using IPsec. Some VPN clients support traversal of IPsec through NAT. This ALG may interfere with the operation of such VPN clients. If you are having trouble connecting with your corporate network, try turning this ALG off. Please check with the system administrator of your corporate network whether your VPN client supports NAT traversal.



- RTSP:** Allows applications that use Real Time Streaming Protocol to receive streaming media from the Internet. QuickTime and Real Player are some of the common applications using this protocol.
- SIP:** Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This ALG may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning this ALG off.

Routing

The *Routing* option is an advanced method of customizing specific routes of data through your network.

Name: Enter a name for your route.

Destination IP: Enter the IP address of packets that will take this route.

Netmask: Enter the netmask of the route. Please note that the octets must match your destination IP address.

Gateway: Enter your next hop gateway to be taken if this route is used.

Metric: The route metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 15 is the highest cost.

Interface: Select the interface that the IP packet must use to transit out of the router when this route is used.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'DIR-855L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADVANCED' tab is selected, and the 'ROUTING' section is active. The main content area contains a 'ROUTING' header, a description: 'This Routing page allows you to specify custom routes that determine how data is moved around your network.', and two buttons: 'Save Settings' and 'Don't Save Settings'. Below this is a table titled '32 --ROUTE LIST' with columns for Name, Destination IP, Netmask, Gateway, Metric, and Interface. The table contains three rows, each with a checkbox, a Name field, a Destination IP field (0.0.0.0), a Netmask field (0.0.0.0), a Gateway field (0.0.0.0), a Metric field (1), and an Interface dropdown menu (WAN). The 'Helpful Hints..' sidebar on the right provides additional information: 'Each route has a check box next to it, check this box if you want the route to be enabled.', 'The name field allows you to specify a name for identification of this route, e.g. "Network 2"', 'The destination IP address is the address of the host or network you wish to reach.', 'The netmask field identifies the portion of the destination IP in use.', and 'The gateway IP address is the IP address of the router, if any, used to reach the specified destination.'

Advanced Wireless

Transmit Power: Set the transmit power of the antennas.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

WMM Enable: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

Short GI: Check this box to reduce the guard interval time therefore increasing the data capacity. However, it's less reliable and may create higher data loss.

HT20/40 Coexistence: Enable this option to reduce interference from other wireless networks in your area. If the channel width is operating at 40MHz and there is another wireless network's channel over-lapping and causing interference, the router will automatically change to 20MHz.

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DIR-855L // SETUP ADVANCED TOOLS STATUS SUPPORT

ADVANCED WIRELESS

If you are not familiar with these Advanced Wireless settings, please read the help section before attempting to modify these settings.

Save Settings Don't Save Settings

ADVANCED WIRELESS SETTINGS

Wireless Band : 2.4GHz
 Transmit Power : High
 WLAN Partition :
 WMM Enable :
 Short GI :
 HT20/40 Coexistence : Enable Disable

ADVANCED WIRELESS SETTINGS

Wireless Band : 5GHz
 Transmit Power : High
 WLAN Partition :
 WMM Enable :
 Short GI :

Helpful Hints...

It is recommended that you leave these parameters at their default values. Adjusting them could limit the performance of your wireless network.

Use **802.11d** only for countries where it is required.

Enabling **WMM** can help control latency and jitter when transmitting multimedia content over a wireless connection.

[More...](#)

Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during initial setup as well as the “Add New Device” processes. The Wi-Fi Alliance (WFA) has certified it across different products as well as manufactures. The process is just as easy as pressing a button for the Push-Button Method, or correctly entering the 8-digit code for the Pin Code Method. The time reduction in setup and ease of use are quite beneficial, while the highest wireless security setting of WPA2 is automatically used.

Enable: Enable the *Wi-Fi Protected Setup* feature.

Note: If this option is unchecked, the WPS button on the side of the router will be disabled.

Lock WPS-PIN Setup: Locking the wireless security settings prevents the settings from being changed by the *Wi-Fi Protected Setup* feature of the router. Devices can still be added to the network using *Wi-Fi Protected Setup*, however, the settings of the network will not change once this option is checked.

PIN Settings: A PIN is a unique number that can be used to add the router to an existing network or to create a new network. The default PIN may be printed on the bottom of the router. For extra security, a new PIN can be generated. You can restore the default PIN at any time. Only the Administrator (“admin” account) can change or reset the PIN.

Current PIN: Shows the current PIN.

Reset PIN to

Default: Restore the default PIN of the router.

Generate New PIN: Create a random number that is a valid PIN. This becomes the router’s PIN. You can then copy this PIN to the user interface of the registrar.

The screenshot shows the D-Link router's configuration page for Wi-Fi Protected Setup. The interface includes a navigation menu on the left with options like VIRTUAL SERVER, PORT FORWARDING, and APPLICATION RULES. The main content area is divided into sections: 'WI-FI PROTECTED SETUP' (with a description and 'Save Settings'/'Don't Save Settings' buttons), 'WI-FI PROTECTED SETUP' (with 'Enable' checked and 'Lock WPS-PIN Setup' unchecked), 'PIN SETTINGS' (showing 'Current PIN: 11750604' and 'Generate New PIN'/'Reset PIN to Default' buttons), and 'ADD WIRELESS STATION' (with an 'Add Wireless Device with WPS' button). A sidebar on the right contains 'Helpful Hints...' and 'More...' links.

Add Wireless

Station: This wizard helps you add wireless devices to the wireless network.

The wizard will either display the wireless network settings to guide you through manual configuration, prompt you to enter the PIN for the device, or ask you to press the configuration button on the device. If the device supports Wi-Fi Protected Setup and has a configuration button, you can add it to the network by pressing the configuration button on the device and then the on the router within 60 seconds. The status LED on the router will flash three times if the device has been successfully added to the network.

There are several ways to add a wireless device to your network. A “registrar” controls access to the wireless network. A registrar only allows devices onto the wireless network if you have entered the PIN, or pressed a special Wi-Fi Protected Setup button on the device. The router acts as a registrar for the network, although other devices may act as a registrar as well.

Add Wireless

Device Wizard: Click to start the wizard and skip to page 43.

WPS Button

You can also simply press the **WPS** button on the side of the router, and then press the WPS button on your wireless client to automatically connect without logging into the router.

Refer to page 110 for more information.



Advanced Network Settings

Enable UPnP: To use the *Universal Plug and Play (UPnP)* feature click on **Enabled**. *UPnP* provides compatibility with networking equipment, software and peripherals.

WAN Ping: Checking the box will allow the DIR-855L to respond to pings. Unchecking the box may provide some extra security from hackers.

WAN Ping Inbound Filter: Select from the drop-down menu if you would like to apply the *Inbound Filter* to the WAN ping. Refer to the *Inbound Filters* section for more information.

WAN Port Speed: You may set the port speed of the Internet port to **10Mbps, 100Mbps, 1000Mbps** or **Auto** (recommended).

Enable IPv4 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet (IPv4).

Enable IPv6 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet (IPv6).

The screenshot displays the 'Advanced Network' configuration page for a D-Link DIR-855L router. The page is organized into several sections:

- ADVANCED NETWORK:** A warning message states: "If you are not familiar with these Advanced Network settings, please read the help section before attempting to modify these settings." Below this are two buttons: "Save Settings" and "Don't Save Settings".
- UPNP:** A section titled "Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices." It includes a checkbox for "Enable UPnP" which is checked.
- WAN PING:** A section with the text: "If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address." It contains:
 - A checkbox for "Enable WAN Ping Respond" which is unchecked.
 - A dropdown menu for "WAN Ping Inbound Filter" set to "Allow All".
 - A text input field for "Details" containing "Allow_All".
- WAN PORT SPEED:** A section with a dropdown menu for "WAN Port Speed" set to "Auto 10/100/1000Mbps".
- IPV4 MULTICAST STREAMS:** A section with a checkbox for "Enable IPv4 Multicast Streams" which is unchecked.
- IPV6 MULTICAST STREAMS:** A section with a checkbox for "Enable IPv6 Multicast Streams" which is checked.

On the right side of the page, there is a "Helpful Hints..." section with additional information:

- UPnP:** "UPnP helps other UPnP LAN hosts interoperate with the router. Leave the UPnP option enabled as long as the LAN has other UPnP applications."
- Security:** "For added security, it is recommended that you disable the WAN Ping Respond option. Ping is often used by malicious Internet users to locate active networks or PCs."
- WAN Speed:** "The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually."
- Multicast Streams:** "If you are having trouble receiving multicast streams from the Internet, make sure the Multicast Streams option is enabled."

A "More..." link is visible at the bottom of the hints section.

Guest Zone

The *Guest Zone* feature will allow you to create temporary zones that can be used by guests to access the Internet. These zones will be separate from your main wireless network. You may configure different zones for the 2.4GHz and 5GHz wireless bands.

Enable Guest

Zone: Check to enable the *Guest Zone* feature.

Schedule: The schedule of time when the *Guest Zone* will be active. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section or click **Add New**.

Wireless Network Name: Enter a wireless network name (SSID) that is different from your main wireless network.

Enable Routing Between Zones: Check to allow network connectivity between the different zones created.

Security Mode: Select the type of security or encryption you would like to enable for the *Guest Zone*.

D-Link				
DIR-855L	SETUP	ADVANCED	TOOLS	SUPPORT
VIRTUAL SERVER	GUEST ZONE			Helpful Hints... Use this section to configure the guest zone settings of your router. The guest zone provide a separate network zone for guest to access Internet. More...
PORT FORWARDING	Use this section to configure the guest zone settings of your router. The guest zone provide a separate network zone for guest to access Internet. Save Settings Don't Save Settings			
APPLICATION RULES	GUEST ZONE SELECTION			
QOS ENGINE	Enable Guest Zone : <input type="checkbox"/> Always <input type="button" value="New Schedule"/>			
NETWORK FILTER	Wireless Band : 2.4GHz Band			
ACCESS CONTROL	Wireless Network Name : dlink_guest (Also called the SSID)			
WEBSITE FILTER	Security Mode : None			
INBOUND FILTER	GUEST ZONE SELECTION			
FIREWALL SETTINGS	Enable Guest Zone : <input type="checkbox"/> Always <input type="button" value="New Schedule"/>			
ROUTING	Wireless Band : 5GHz Band			
ADVANCED WIRELESS	Wireless Network Name : dlink_media_guest (Also called the SSID)			
WI-FI PROTECTED SETUP	Security Mode : None			
ADVANCED NETWORK				
GUEST ZONE				
IPV6 FIREWALL				
IPV6 ROUTING				

IPv6 Firewall

The DIR-855L's *IPv6 Firewall* feature allows you to configure which kind of IPv6 traffic is allowed to pass through the device. The DIR-855L's *IPv6 Firewall* functions in a similar way to the *IP Filters* feature.

Enable IPv6 Simple

Security: Check to enable the IPv6 firewall simple security.

Enable IPv6

Ingress Filtering: Check to enable IPv6 ingress filter.

Configure IPv6

Firewall: Select an action from the drop-down menu.

Name: Enter a name to identify the *IPv6 Firewall Rule*.

Schedule: Use the drop-down menu to select the time schedule that the *IPv6 Firewall Rule* will be enabled on. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Source: Use the *Source* drop-down menu to specify the interface that connects to the source IPv6 addresses of the firewall rule.

IP Address Range: Enter the source IPv6 address range in the adjacent *IP Address Range* field.

Dest: Use the *Dest* drop-down menu to specify the interface that connects to the destination IP addresses of the firewall rule.

Protocol: Select the protocol of the firewall port (**All**, **TCP**, **UDP** or **ICMP**).

Port Range: Enter the first port of the range that will be used for the firewall rule in the first box and enter the last port in the field in the second box.

The screenshot shows the D-Link DIR-855L web interface. The main navigation bar includes 'DIR-855L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration sections, with 'IPv6 FIREWALL' selected. The main content area is titled 'IPv6 FIREWALL' and contains the following sections:

- IPv6 FIREWALL:** A text box explaining that the Firewall settings section is an advanced feature used to allow or deny traffic from passing through the device. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- IPv6 SIMPLE SECURITY:** A section with two checkboxes: 'Enable IPv6 Ingress Filtering' (checked) and 'Enable IPv6 Simple Security' (unchecked).
- IPv6 FIREWALL:** A section for configuring IPv6 Firewall rules. It includes a dropdown for 'Turn IPv6 Firewall OFF' and a table for 'Remaining number of firewall rules that can be configured:'. The table has columns for Name, Schedule, Interface, IP Address Range, Protocol, and Port Range. The first rule is numbered '1.' and has 'Source' and 'Dest' checkboxes.

On the right side of the interface, there is a 'Helpful Hints...' section with text explaining that for each rule, you can create a name and control the direction of traffic. It also mentions that you can allow or deny a range of IP addresses, the protocol, and a port range. A 'More...' link is provided at the bottom of the hints section.

IPv6 Routing

The *IPv6 Routing* section allows you to specify custom routes that determine how data is moved around your network.

Route List: Check the box next to the route you wish to enable.

Name: Enter a specific name to identify this route.

Destination IP/Prefix Length: Enter the IP address of the router that will be used to reach the specified destination or enter the IPv6 address prefix length of the packets that will take this route.

Metric: Enter the metric value for this rule here.

Interface: Use the drop-down menu to specify if the IP packet must use the WAN or LAN interface to transit out of the router.

Gateway: Enter the next hop that will be taken if this route is used.

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DIR-855L //

SETUP ADVANCED TOOLS STATUS SUPPORT

IPv6 ROUTING

This Routing page allows you to specify custom routes that determine how data is moved around your network.

Save Settings Don't Save Settings

ROUTE LIST

<input type="checkbox"/>	Name	Destination IP/Prefix Length	Metric	Interface	Gateway
<input type="checkbox"/>		/64	1	NULL	
<input type="checkbox"/>		/64	1	NULL	
<input type="checkbox"/>		/64	1	NULL	

Helpful Hints...

Each route has a check box next to it, check this box if you want the route to be enabled.

The name field allows you to specify a name for identification of this route, e.g. "Network 2"

The destination IP address is the address of the host or network you wish to reach.

The netmask field identifies the portion of the destination IP in use.

The gateway IP address is the IP address of the router, if any, used to reach

Tools Admin

Tools will allow you to change the **Administrator** and **User** passwords. You can also enable *Remote Management*. There are two accounts that can access the management interface through the web browser: **admin** and **user**. Admin has read/write access, while user has read-only access. User can only view the settings but cannot make any changes. Only the admin account has the ability to change both admin and user account passwords.

Admin Password: Enter a new password for the *Administrator Login Name*. The **administrator** can make changes to the settings.

User Password: Enter the new password for the *User Login*. If you login as the **User**, you cannot change the settings (you can only view them).

System Name: Enter a name for your router.

Enable Graphical Authentication: Enables a challenge-response test to require users to type letters or numbers from a distorted image displayed on the screen to prevent online hackers and unauthorized users from gaining access to your router's network settings.

Enable HTTPS Server: Check to enable *HTTPS* to connect to the router securely. This means to connect to the router you must enter **https://192.168.0.1** (for example) instead of **http://192.168.0.1**.

Enable Remote Management: *Remote Management* allows the DIR-855L to be configured from the Internet by a web browser. A username/password is still required to access the Web Management interface.

Remote Admin Port: The port number used to access the DIR-855L is used in the URL. Example: **http://x.x.x.x:8080** whereas x.x.x.x is the Internet IP address of the DIR-855L and 8080 is the port used for the Web Management interface.

If you have enabled *HTTPS Server*, you must enter **https://** as part of the URL to access the router remotely.

Remote Admin Inbound Filter: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule. **Details** will display the current status.

The screenshot shows the D-Link DIR-855L web management interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS (selected), STATUS, and SUPPORT. The left sidebar lists various configuration sections: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'ADMINISTRATOR SETTINGS' and contains the following sections:

- ADMINISTRATOR SETTINGS:** A text box explaining that 'admin' and 'user' accounts can access the management interface. The admin has read/write access and can change passwords, while the user has read-only access. Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- ADMIN PASSWORD:** A section with the instruction 'Please enter the same password into both boxes, for confirmation.' It contains two input fields for 'Password' and 'Verify Password'.
- USER PASSWORD:** A section with the instruction 'Please enter the same password into both boxes, for confirmation.' It contains two input fields for 'Password' and 'Verify Password'.
- SYSTEM NAME:** A section with a 'Gateway Name' input field containing 'DIR-855L'.
- ADMINISTRATION:** A section with several checkboxes: 'Enable Graphical Authentication', 'Enable HTTPS Server', and 'Enable Remote Management'. Below these are 'Remote Admin Port' (input field with '8080') and 'Use HTTPS' (checkbox). There is also an 'Inbound Filter' dropdown menu set to 'Allow All' and a 'Details' input field set to 'Allow All'.

On the right side of the interface, there is a 'Helpful Hints...' section with several tips:

- For security reasons, it is recommended that you change the password for the Admin and User accounts. Be sure to write down the new and passwords to avoid having to reset the router in case they are forgotten.
- Enabling Remote Management, allows you or others to change the router configuration from a computer on the Internet.
- Choose a port to open for remote management.
- Select a filter that controls access as needed for this admin port. If you do not see the filter you need in the list of filters, go to the **Advanced** screen and create a new filter.

The bottom of the page has a 'WIRELESS' section.

Time

The *Time Configuration* section allows you to configure, update and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the Time Server. Daylight Saving can also be configured to automatically adjust the time when needed.

Time: Displays the current date and time of the router.

Time Zone: Select your Time Zone from the drop-down menu.

Enable Daylight Saving: To enable Daylight Saving time manually, check the box and enter a start date and an end date for daylight saving time.

Enable NTP Server: NTP is short for Network Time Protocol. A NTP server will sync the time and date with your router. This will only connect to a server on the Internet, not a local server. Check the box to enable this feature.

NTP Server Used: Enter the IP address of a NTP server or select one from the drop-down menu.

Manual: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute and Second and then click **Set Time**.

You can also click **Copy Your Computer's Time Settings** to synch the date and time with the computer you are currently on.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'DIR-855L //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists 'ADMIN', 'TIME', 'SYSLOG', 'EMAIL SETTINGS', 'SYSTEM', 'FIRMWARE', 'DYNAMIC DNS', 'SYSTEM CHECK', and 'SCHEDULES'. The main content area is titled 'TIME' and contains the following sections:

- TIME:** A text box explaining the configuration options and buttons for 'Save Settings', 'Don't Save Settings', and 'Reboot Now'.
- TIME CONFIGURATION:** Displays the current time as 'Sunday, September 16, 2012 3:23:56 PM'. The 'Time Zone' is set to '(GMT-08:00) Pacific Time (US/Canada), Tijuana'. There is an unchecked checkbox for 'Enable Daylight Saving'. Below, 'Daylight Saving Dates' are configured with DST Start on Mar 3rd Sun at 1:00 AM and DST End on Nov 2nd Sun at 1:00 AM.
- AUTOMATIC TIME CONFIGURATION:** Features an unchecked checkbox for 'Enable NTP Server' and a field for 'NTP Server Used' with a dropdown menu to 'Select NTP Server'.
- SET THE DATE AND TIME MANUALLY:** Provides fields for 'Date And Time' with dropdowns for Year (2002), Month (Jan), Day (1), Hour (12), Minute (00), and Second (00), along with an AM/PM selector and a 'Copy Your Computer's Time Settings' button.

The right sidebar contains 'Helpful Hints...' with the text: 'Good timekeeping is important for accurate logs and scheduled firewall rules.' and a 'More...' link.

SysLog

The DIR-855L keeps a running log of events and activities occurring. You may send these logs to a *SysLog* server on your network.

Enable Logging to SysLog Server: Check this box to send the router logs to a SysLog server.

SysLog Server IP Address: The address of the SysLog server that will be used to send the logs. You may also select your computer from the drop-down menu (only if receiving an IP address from the router via DHCP).

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DIR-855L // SETUP ADVANCED **TOOLS** STATUS SUPPORT

SYSLOG

The SysLog options allow you to send log information to a SysLog Server.

Save Settings Don't Save Settings

SYSLOG SETTINGS

Enable Logging To Syslog Server:

Syslog Server IP Address: 0.0.0.0 << Computer Name

Helpful Hints...

A System Logger (syslog) is a server that collects in one place the logs from different sources. If the LAN includes a syslog server, you can use this option to send the router's logs to that server.

More...

E-mail Settings

The *E-mail Settings* feature can be used to send the system log files, router alert messages, and firmware update notification to your e-mail address.

Enable E-mail Notification: When this option is enabled, router activity logs are e-mailed to a designated e-mail address.

From E-mail Address: This e-mail address will appear as the sender when you receive a log file or firmware upgrade notification via e-mail.

To E-mail Address: Enter the e-mail address where you want the e-mail sent.

SMTP Server Address: Enter the SMTP server address for sending e-mail.

SMTP Server Port: Enter the SMTP port used on the server.

Enable Authentication: Check this box if your SMTP server requires authentication.

Account Name: Enter your account for sending e-mail.

Password: Enter the password associated with the account. Re-type the password associated with the account.

On Log Full: When this option is selected, logs will be sent via e-mail to your account when the log is full.

On Schedule: Selecting this option will send the logs via e-mail according to schedule.

Schedule: This option is enabled when **On Schedule** is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

Real-Time Browsing History: Check to enable browsing history (for mydlink Lite app).

Push Event: Check to enable and select which alerts to be sent to your mobile device (for mydlink Lite app).

Event Trigger: Check to enable event triggering (for mydlink Lite app).

The screenshot shows the D-Link web interface for the DIR-855L router. The 'EMAIL SETTINGS' page is active, with a navigation menu on the left and a sidebar on the right. The main content area contains the following elements:

- Header:** D-Link logo and navigation tabs: SETUP, ADVANCED, TOOLS, STATUS, SUPPORT.
- Left Sidebar:** ADMIN, TIME, SYSLOG, EMAIL SETTINGS (selected), SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, SCHEDULES.
- Main Content:**
 - EMAIL SETTINGS:** A message explaining the feature and two buttons: 'Save Settings' and 'Don't Save Settings'.
 - ENABLE:** A section with a checkbox for 'Enable Email Notification'.
 - EMAIL SETTINGS (Form):** Fields for 'From Email Address', 'To Email Address', 'SMTP Server Address', 'SMTP Server Port' (25), 'Enable Authentication' (checkbox), 'Account Name' (User), 'Password' (****), and 'Verify Password' (****).
 - EMAIL LOG WHEN FULL OR ON SCHEDULE:**
 - Checkboxes for 'On Log Full' and 'On Schedule'.
 - 'Schedule' dropdown menu (Never).
 - 'Details' dropdown menu (Never).
- Right Sidebar:** 'Helpful Hints...' section with text: 'You may want to make the email settings similar to those of your email client program.' and a 'More...' link.

System

The *System Settings* section allows you to manage the router's configuration settings, reboot the router and restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you've created.

Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. A file dialog will appear, allowing you to select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the **Browse** option to find a previously saved file of configuration settings. Then, click the **Load** button to transfer those settings to the router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save** button above.

Reboot Device: Click to reboot the router.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM (highlighted), FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'SYSTEM SETTINGS' and contains the following text and buttons:

SYSTEM SETTINGS

The System Settings section allows you to reboot the device, or restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you have created.

The current system settings can be saved as a file onto the local hard drive. The saved file or any other saved setting file created by device can be uploaded into the unit.

Save Settings To Local Hard Drive:

Load Settings From Local Hard Drive:

Restore To Factory Default Settings:
Restore all Settings to the Factory Defaults

Reboot The Device:

Helpful Hints...

Once your router is configured the way you want it, you can save the configuration settings to a configuration file.

You might need this file so that you can load your configuration later in the event that the router's default settings are restored.

To save the configuration, click the **Save Configuration** button.

[More...](#)

Firmware

The *Firmware Update* section allows you to upgrade the firmware of the DIR-855L. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support website for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from this site.

Browse: After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

Upload: Once you have a firmware update on your computer, use this option to browse for the file and then upload the information into the router.

Language Pack

You can change the language of the web UI by uploading available language packs.

Browse: After you have downloaded the new language pack, click **Browse** to locate the language pack file on your hard drive. Click **Upload** to complete the language pack upgrade.

The screenshot displays the D-Link DIR-855L web management interface. The top navigation bar includes 'DIR-855L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'TOOLS' menu is expanded, showing options like ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'FIRMWARE UPDATE' and contains the following text:

There may be new firmware for your DIR-855L to improve functionality and performance.

To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button below to start the firmware upgrade.

The language pack allows you to change the language of the user interface on the DIR-855L. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.

To upgrade the language pack, locate the upgrade file on the local hard drive with Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.

Below this text is a section titled 'FIRMWARE AND LANGUAGE PACK INFORMATION' with the following details:

- Current Firmware Version : 1.00Default Date : 13 Sep 2012
- Current Language Pack Version: No Language Pack

A 'Check Now' button is provided to check for updates. Below this is the 'FIRMWARE UPDATE' section, which includes a note: 'Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the Tools → System screen.' It also states: 'To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.' There is a text input field and a 'Browse...' button, followed by an 'Upload' button.

The bottom section is 'LANGUAGE PACK UPDATE', which includes a text input field and 'Browse...' and 'Upload' buttons.

On the right side of the interface, there is a 'Helpful Hints...' section with text: 'Firmware updates are released periodically to improve the functionality of your router and to add features. If you run into a problem with a specific feature of the router, check if updated firmware is available for your router.' and a 'More...' link.

Dynamic DNS

The *Dynamic DNS* feature allows you to host a server (Web, FTP, Game Server, etc.) using a domain name that you have purchased (i.e., www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is.

Enable *Dynamic Domain Name System* is a method of **Dynamic DNS**: keeping a domain name linked to a changing IP address. Check the box to enable DDNS.

Server Address: Select your DDNS provider from the drop-down menu or enter the DDNS server address.

Host Name: Enter the Host Name that you registered with your DDNS service provider.

Username or Key: Enter the Username or key for your DDNS account.

Password or Key: Enter the Password or key for your DDNS account.

Timeout: Enter a timeout time (in hours).

Status: Displays the current connection status.

The screenshot shows the D-Link DIR-855L web interface. The main content area is titled 'DYNAMIC DNS' and contains the following information:

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.

Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.

Buttons: Save Settings, Don't Save Settings

DYNAMIC DNS

Enable Dynamic DNS :

Server Address : << Select Dynamic DNS Server

Host Name :

Username or Key :

Password or Key :

Verify Password or Key :

Timeout : 576 (hours)

Status : Disconnected

DYNAMIC DNS FOR IPV6 HOSTS

Enable:

IPv6 Address: << Computer Name

Host Name: (e.g.: ipv6.mydomain.net)

Buttons: Save, Clear

IPV6 DYNAMIC DNS LIST

Enable	Host Name	IPv6 Address
<input type="checkbox"/>		

Helpful Hints...

To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.

[More...](#)

System Check

Ping Test: The *Ping Test* is used to send ping packets to test if a computer is on the Internet. Enter the IP address that you wish to test and click **Ping**.

IPv6 Ping Test: Enter the IPv6 address that you wish to ping and click **Ping**.

Ping Results: The results of your ping attempts will be displayed here.

The screenshot displays the D-Link DIR-855L web interface. The top navigation bar includes 'DIR-855L //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various system settings: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK (highlighted), and SCHEDULES. The main content area is titled 'SYSTEM CHECK' and contains three sections: 'PING TEST' (with a description and a 'Host Name or IP Address' input field), 'IPv6 PING TEST' (with an 'Host Name or IPv6 Address' input field), and 'PING RESULT' (with a prompt to enter a host name or IP address). A 'Helpful Hints...' sidebar on the right explains the ping test process and provides a 'More...' link.

Schedules

Schedules can be created for use with enforcing rules. For example, if you want to restrict web access to Mon-Fri from 3 p.m. to 8 p.m., you could create a schedule selecting Mon, Tue, Wed, Thu and Fri and enter a Start Time of 3 p.m. and End Time of 8 p.m.

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or **All Week** to include every day.

Time: Check **All Day - 24hrs** or enter a start and end time for your schedule.

Save: You must click **Save Settings** at the top for your schedules to go into effect.

Schedule Rules The list of schedules will be listed here. Click the **List:** **Edit** icon to make changes or click the **Delete** icon to remove the schedule.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'DIR-855L //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES (highlighted). The main content area is titled 'SCHEDULES' and contains the text: 'The Schedule configuration option is used to manage schedule rules for various firewall and parental control features.' Below this are 'Save Settings' and 'Don't Save Settings' buttons. The '10 - ADD SCHEDULE RULE' section includes a 'Name' field, 'Day(s)' options (All Week selected, Select Day(s) with checkboxes for Sun-Sat), an 'All Day - 24 hrs' checkbox, a 'Time Format' dropdown (set to 24-hour), and 'Start Time' and 'End Time' fields with AM/PM selectors. The 'SCHEDULE RULES LIST' table has columns for Name, Day(s), and Schedule Rules List. The right sidebar, titled 'Helpful Hints...', provides instructions on naming schedules, saving, editing, and deleting them.

Status

Device Info

The *Device Info* page displays the current information for the DIR-855L. It will display the LAN, WAN (Internet), and Wireless information. If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP.

If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

General: Displays the router's time and firmware version.

WAN: Displays the MAC address and the public IP settings

LAN: Displays the MAC address and the private (local) IP settings for the router.

Wireless LAN1: Displays the 2.4GHz wireless MAC address and your wireless settings such as SSID and Channel.

Wireless LAN2: Displays the 5GHz wireless MAC address and your wireless settings such as SSID and Channel.

LAN Computers: Displays computers and devices that are connected to the router via Ethernet and that are receiving an IP address assigned by the router (DHCP).

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, ROUTING, WIRELESS, IPV6, and IPV6 ROUTING. The main content area is titled 'DEVICE INFORMATION' and contains the following sections:

- GENERAL:**
 - Time: Thursday, September 13, 2012 8:22:04 PM
 - Firmware Version: 1.00Default, 13, Sep, 2012
- WAN:**
 - Connection Type: DHCP Client
 - Cable Status: Connected
 - Network Status: Established
 - Connection Up Time: 0 Day, 1:55:38
 - Buttons: DHCP Renew, DHCP Release
 - MAC Address: 00:18:E7:00:00:01
 - IP Address: 192.168.0.111
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 0.0.0.0
 - Primary DNS Server: 192.168.0.1
 - Secondary DNS Server: 0.0.0.0
 - Advanced DNS: Disabled
- LAN:**
 - MAC Address: 00:18:E7:00:00:00
 - IP Address: 192.168.0.1
 - Subnet Mask: 255.255.255.0
 - DHCP Server: Enabled
- WIRELESS LAN:**
 - Wireless Band: 2.4GHz Band
 - Wireless Radio: Enabled
 - 802.11 Mode: Mixed 802.11n, 802.11g and 802.11b
 - Channel Width: Auto 20/40 MHz
 - Channel: 11
 - Wi-Fi Protected Setup: Enabled/Configured
 - SSID List:

Wi-Fi Network Name (SSID)	Guest	MAC Address	Security Mode
dlink-0000	No	00:18:E7:00:00:00	AUTO (WPA or WPA2) - PSK
- WIRELESS LAN:**
 - Wireless Band: 5GHz Band
 - Wireless Radio: Off
- LAN COMPUTERS:**

IP Address	Name (if any)	MAC
- IGMP MULTICAST MEMBERSHIPS:**

Multicast Group Address

Logs

The router automatically logs (records) events of possible interest in its internal memory. The *Logs* option allows you to view the router logs. If there isn't enough internal memory for all events, logs of older events are deleted, but logs of the latest events are retained. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

Log Options: You can select the types of messages that you want to display from the log. **System Activity, Debug Information, Attacks, Dropped Packets,** and **Notice** messages can be selected. Click **Apply Log Settings Now** to activate your settings.

Refresh: Updates the log details on the screen so it displays any recent activity.

First Page: Click to go to the first page.

Last Page: Click to go to the last page.

Previous: Click to go back one page.

Next: Click to go to the next page.

Clear: Clears all of the log contents.

E-mail Now: This option will send a copy of the router log to your e-mail address configured in the **Tools > E-mail Settings** screen.

Save Log: This option will save the router log to a file on your computer.

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DIR-855L

SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO

LOGS

STATISTICS

INTERNET SESSIONS

ROUTING

WIRELESS

IPV6

IPV6 ROUTING

LOGS

Use this option to view the router logs. You can define what types of events you want to view and the event levels to view. This router also has internal syslog server support so you can send the log files to a computer on your network that is running a syslog utility.

LOG OPTIONS

Log Type : System Activity
 Debug Information
 Attacks
 Dropped Packets
 Notice

Apply Log Settings Now

LOG DETAILS

1/12

Time	Message
Sep 13 18:26:27	reading /etc/resolv.conf
Sep 13 18:26:25	wanttimer: [Cable Connect, No IP]-[Cable Connect, Have IP]
Sep 13 18:26:23	Lease of 192.168.0.111 obtained, lease time 86400
Sep 13 18:26:23	Sending discover...
Sep 13 18:26:23	wanttimer: [Cable Connect, Have IP]-[Cable Connect, No IP]
Sep 13 18:26:22	reading /etc/resolv.conf
Sep 13 18:26:22	DHCP Release WAN IP address = 0.0.0.0
Sep 13 18:26:22	Unicasting a release of 192.168.0.111 to 192.168.0.1
Sep 13 18:26:21	wanttimer: [Cable Connect, No IP]-[Cable Connect, Have IP]
Sep 13 18:26:19	reading /etc/resolv.conf

Helpful Hints...
 Check the log frequently to detect unauthorized network usage.
 You can also have the log mailed to you periodically. Refer to [Tools → E-mail Settings](#).
 More...

Statistics

The screen below displays the *Traffic Statistics*. Here you can view the amount of packets that pass through the DIR-855L on both the WAN, LAN ports and the wireless segments. The traffic counter will reset if the device is rebooted.

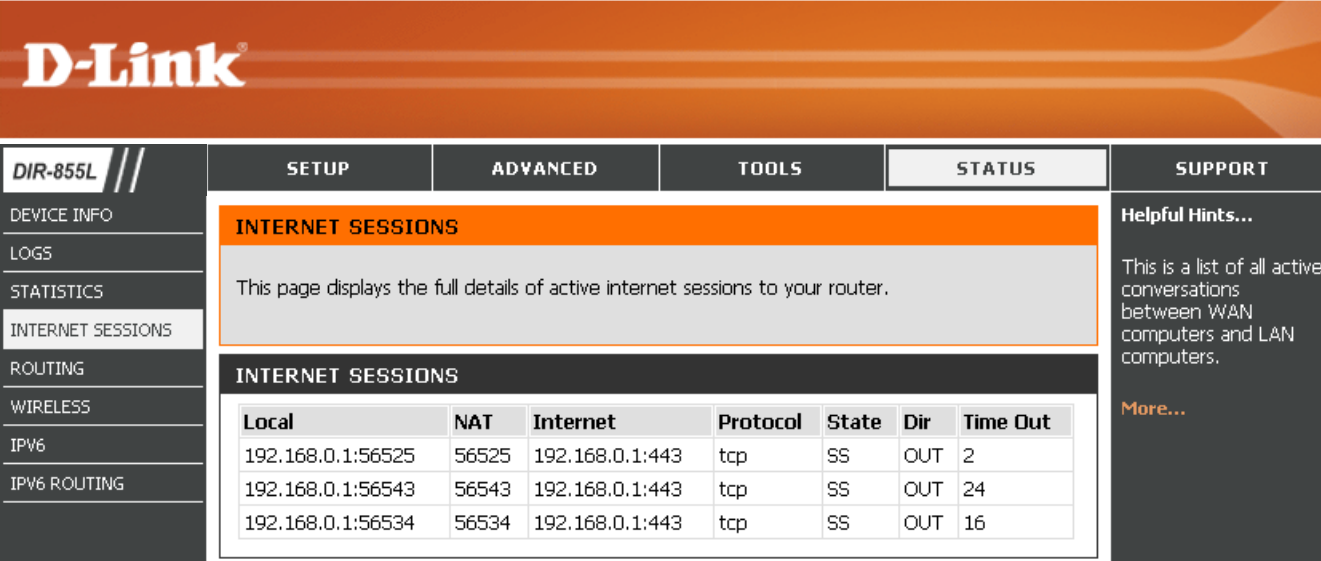
The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a menu with options like DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, ROUTING, WIRELESS, IPV6, and IPV6 ROUTING. The main content area is titled 'TRAFFIC STATISTICS' and provides a summary of traffic passing through the router. It includes buttons for 'Refresh Statistics' and 'Clear Statistics'. Below this, there are four sections of statistics: LAN, WAN, WI-FI 2.4G, and WI-FI 5G. Each section displays 'Sent', 'Received', 'TX/RX Packets', 'Dropped', and 'Errors' counts.

Segment	Sent	Received	TX/RX Packets	Dropped	Errors
LAN STATISTICS	98279	98211	TX Packets: 0	RX Packets: 0	0
WAN STATISTICS	14054	14020	TX Packets: 0	RX Packets: 0	0
WI-FI STATISTICS 2.4G	0	0	TX Packets: 11182	RX Packets: 0	0
WI-FI STATISTICS 5G	0	0	TX Packets: 0	RX Packets: 0	0

Helpful Hints... This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized. [More...](#)

Internet Sessions

The *Internet Sessions* page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.



D-Link

DIR-855L

SETUP ADVANCED TOOLS **STATUS** SUPPORT

DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
ROUTING
WIRELESS
IPv6
IPv6 ROUTING

INTERNET SESSIONS

This page displays the full details of active internet sessions to your router.

INTERNET SESSIONS

Local	NAT	Internet	Protocol	State	Dir	Time Out
192.168.0.1:56525	56525	192.168.0.1:443	tcp	SS	OUT	2
192.168.0.1:56543	56543	192.168.0.1:443	tcp	SS	OUT	24
192.168.0.1:56534	56534	192.168.0.1:443	tcp	SS	OUT	16

Helpful Hints...

This is a list of all active conversations between WAN computers and LAN computers.

[More...](#)

Routing

This page will display your current routing table.

D-Link

DIR-855L // SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
ROUTING
WIRELESS
IPV6
IPV6 ROUTING

ROUTING

Routing Table

This page displays the routing details configured for your router.

ROUTING TABLE

Destination IP	Netmask	Gateway	Metric	Interface	Type	Creator
192.168.0.0	255.255.255.0	0.0.0.0	0	LAN	Internal	System
239.0.0.0	255.0.0.0	0.0.0.0	0	LAN	Internal	System
127.0.0.0	255.0.0.0	0.0.0.0	0	Local Loopback	LOCAL	System

Helpful Hints...
More...

Wireless

The *Wireless Client* table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.

The screenshot shows the D-Link DIR-855L web interface. The top navigation bar includes 'DIR-855L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar contains menu items: 'DEVICE INFO', 'LOGS', 'STATISTICS', 'INTERNET SESSIONS', 'ROUTING', 'WIRELESS', 'IPV6', and 'IPV6 ROUTING'. The main content area is titled 'WIRELESS' and contains the following text: 'Use this option to view the wireless clients that are connected to your wireless router.' Below this, there are two sections for wireless clients:

- NUMBER OF WIRELESS CLIENTS - 2.4GHZ BAND:** A table with columns for MAC Address, IP Address, Mode, Rate, and Signal(%).
- NUMBER OF WIRELESS CLIENTS - 5GHZ BAND:** A table with columns for MAC Address, IP Address, Mode, Rate, and Signal(%).

The right sidebar contains 'Helpful Hints...' with the text: 'This is a list of all wireless clients that are currently connected to your wireless router.' and a 'More...' link.

IPv6

The *IPv6* page displays a summary of the router's IPv6 settings and lists the IPv6 address and host name of any IPv6 clients.

D-Link

DIR-855L //

SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
ROUTING
WIRELESS
IPv6
IPv6 ROUTING

IPv6 Network Information

All of your IPv6 Internet and network connection details are displayed on this page.

IPv6 Connection Information

IPv6 Connection Type : Auto Detection
 Network Status : Disconnected
 Connection Up Time : N/A
 WAN IPv6 Address : None
 IPv6 Default Gateway : None
 LAN IPv6 Address : None
 LAN IPv6 Link-Local Address : fe80::218:e7ff:fe00:0/64
 Primary DNS Address : None
 Secondary DNS Address : None
 DHCP-PD : Enabled
 IPv6 network assigned by DHCP-PD : None

LAN IPv6 Computers

IPv6 Address	Name (if any)

Helpful Hints...
All of your WAN and LAN connection details are displayed here.
[More...](#)

IPv6 Routing

This page displays the *IPv6 Routing* details configured for your router.

The screenshot shows the D-Link web interface for the DIR-855L router. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a menu with options: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, ROUTING, WIRELESS, IPV6, and IPV6 ROUTING (which is currently selected). The main content area is titled 'IPv6 ROUTING' and contains the following text:

IPv6 Routing Table

This page displays the IPv6 routing details configured for your router.

IPv6 Routing Table

Destination IP	Gateway	Metric	Interface
----------------	---------	--------	-----------

Support

The screenshot displays the D-Link DIR-855L web interface. At the top, the D-Link logo is visible. Below it, a navigation bar contains tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The SUPPORT tab is currently selected. On the left side, a vertical menu lists the main sections: MENU, SETUP, ADVANCED, TOOLS, and STATUS. The main content area is titled 'SUPPORT MENU' and contains several sub-sections, each with a list of links:

- SUPPORT MENU**
 - [Setup](#)
 - [Advanced](#)
 - [Tools](#)
 - [Status](#)
- SETUP HELP**
 - [Internet Connection](#)
 - [WAN](#)
 - [Wireless Settings](#)
 - [Network Settings](#)
 - [IPv6](#)
- ADVANCED HELP**
 - [Virtual Server](#)
 - [Port Forwarding](#)
 - [Application Rules](#)
 - [QoS Engine](#)
 - [Network Filter](#)
 - [Access Control](#)
 - [Website Filter](#)
 - [Inbound Filter](#)
 - [Firewall Settings](#)
 - [Routing](#)
 - [Advanced Wireless](#)
 - [Wi-Fi Protected Setup](#)
 - [Advanced Network](#)
 - [GUEST_ZONE](#)
 - [IPv6Firewall](#)
 - [IPv6 Routing](#)
- TOOLS HELP**
 - [Admin](#)
 - [Time](#)
 - [Syslog](#)
 - [Email Settings](#)
 - [System](#)
 - [Firmware](#)
 - [Dynamic DNS](#)
 - [System Check](#)
 - [Schedules](#)
- STATUS**
 - [Device Info](#)
 - [Logs](#)
 - [Statistics](#)
 - [Internet Sessions](#)
 - [Routing](#)
 - [Wireless](#)
 - [IPv6](#)
 - [IPv6 Routing](#)

Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is *WPS (Wi-Fi Protected Setup)*. Most wireless devices, such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras, will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-855L router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable *WPS*. Once you know, follow the steps below:

Step 1 - Press the **WPS button** on the DIR-855L for about one second. The Internet LED on the front will start to blink.



Step 2 - Within two minutes, press the **WPS button** on your wireless client (or launch the software utility and start the *WPS* process).

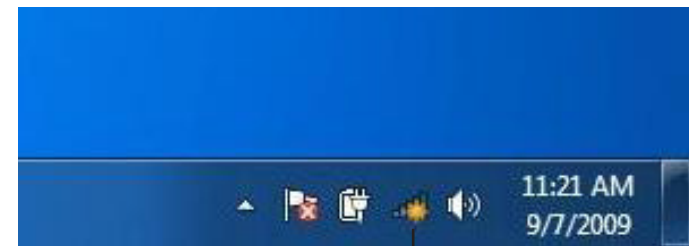
Step 3 - Allow up to one minute to configure. Once the Internet light stops blinking, you will be connected and your wireless connection will be secure with *WPA2*.

Windows® 7

WPA/WPA2

It is recommended to enable wireless security (*WPA/WPA2*) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).



Wireless Icon

2. The utility will display any available wireless networks in your area.

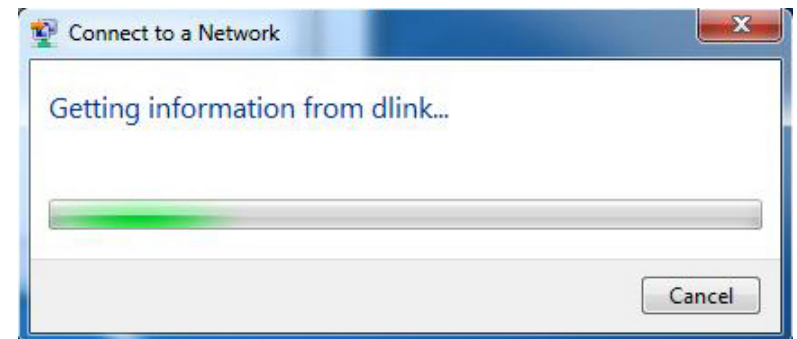


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the *Networking Basics* section in this manual for more information.

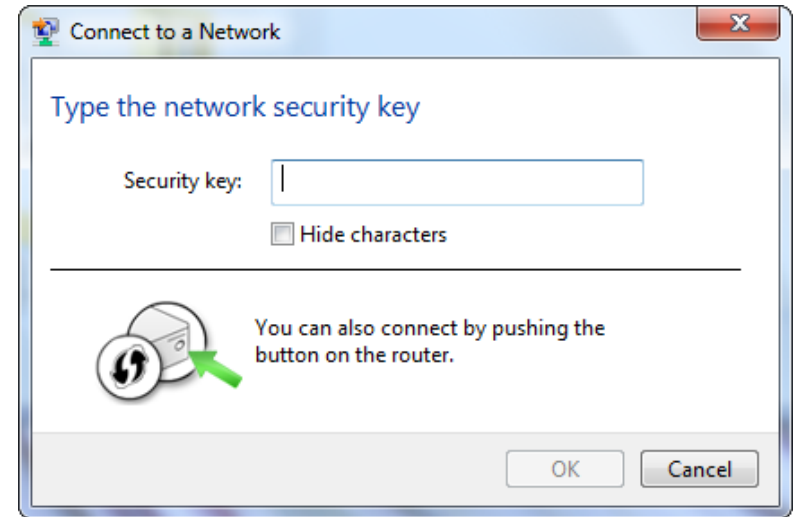


4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase that is on your router and click **Connect**. You can also connect by pushing the **WPS button** on the router.

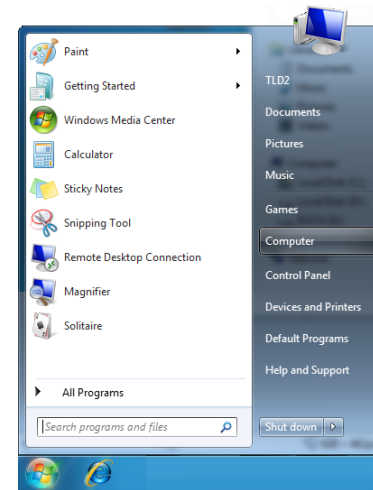
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



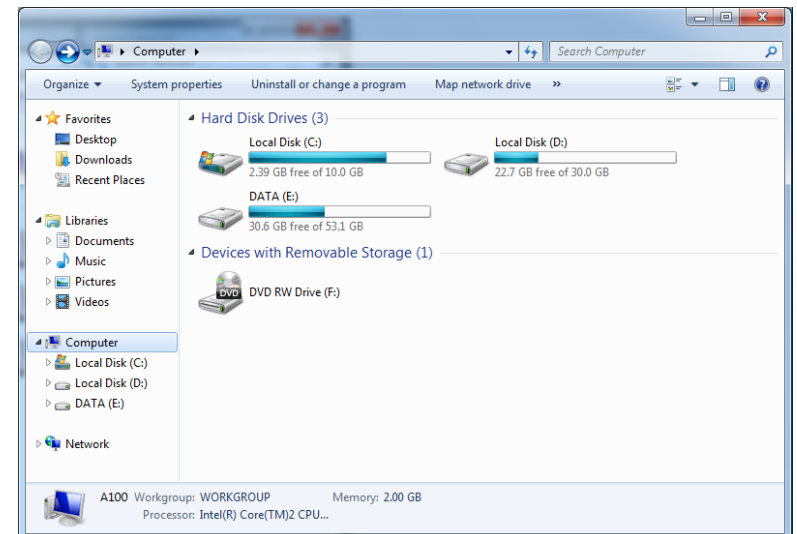
WPS

The *WPS* feature of the DIR-855L can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the *WPS* feature:

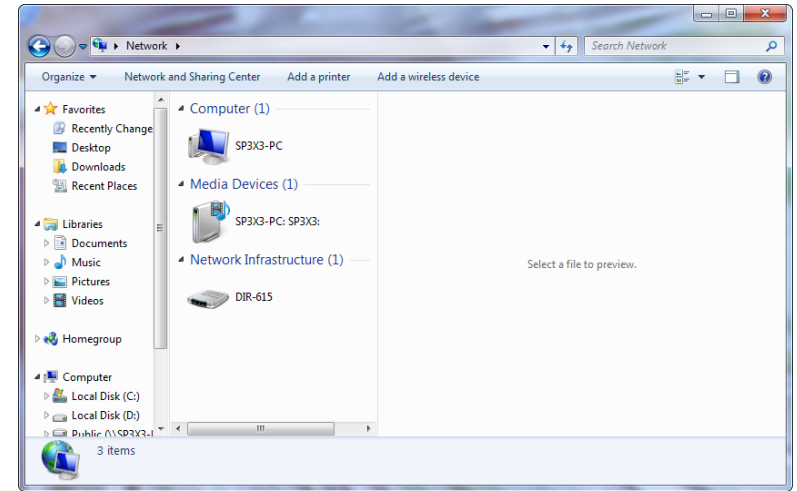
1. Click the **Start** button and select **Computer** from the menu.



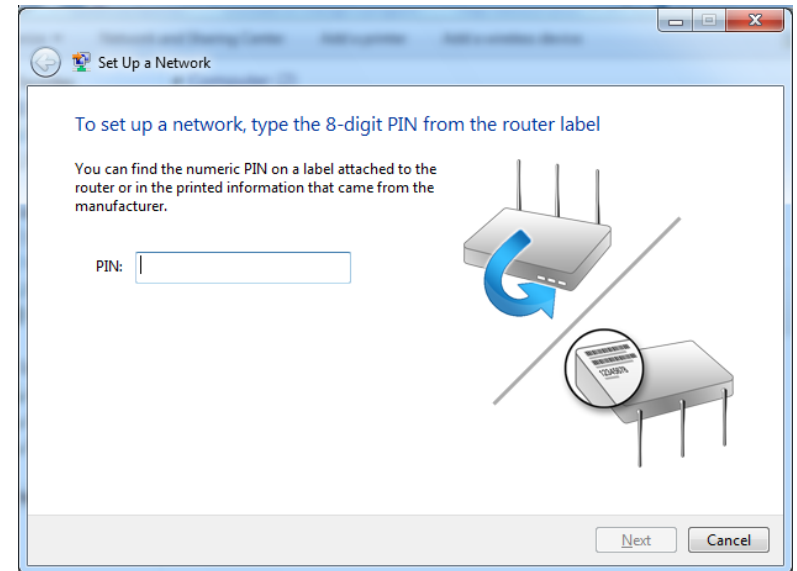
2. Click **Network** on the left side.



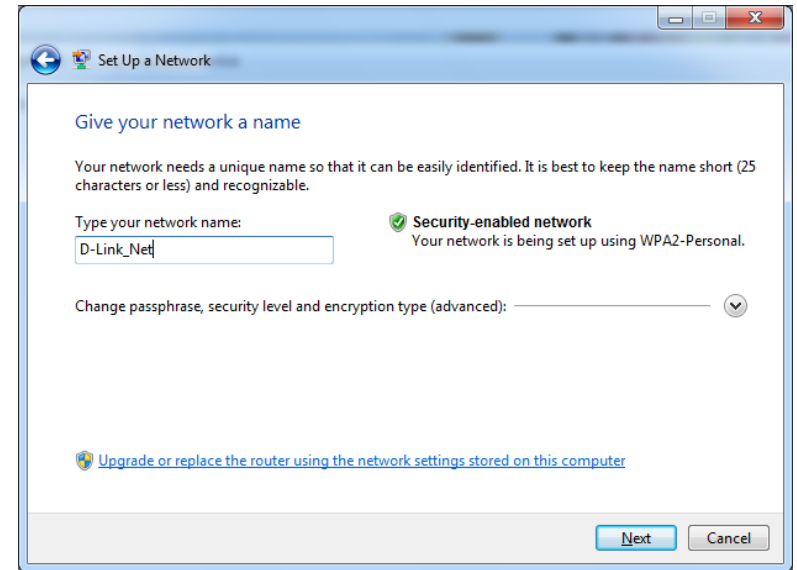
3. Double-click the **DIR-855L**.



4. Input the **WPS PIN** number (displayed in the WPS window on the router's LCD screen or in the **Setup > Wireless Setup** menu in the router's Web UI) and click **Next**.

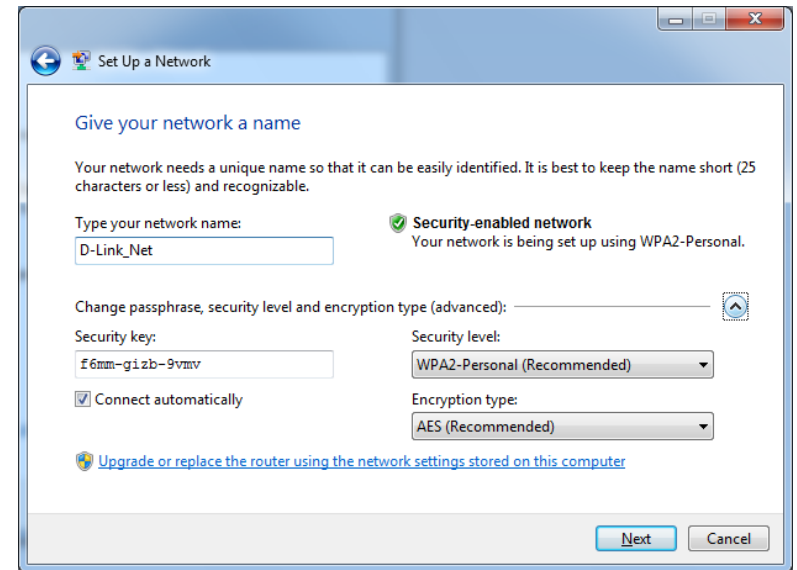


5. Type a name to identify the network.



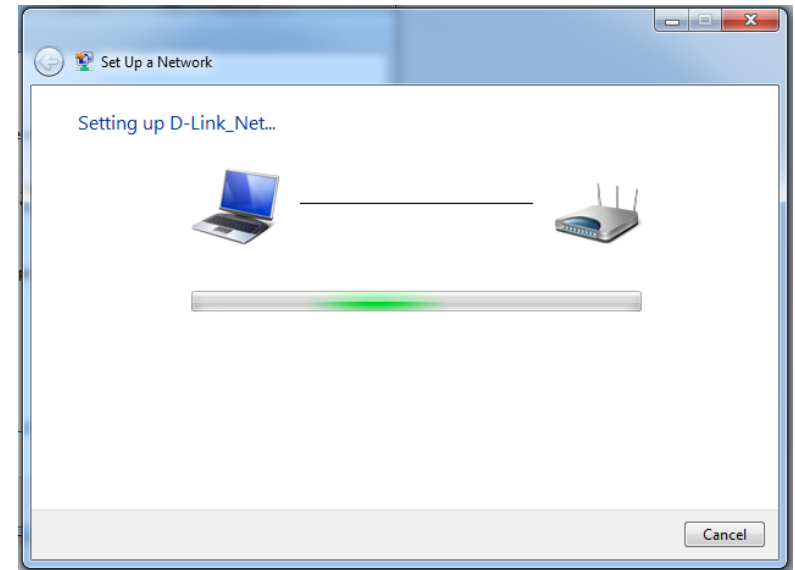
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



7. The following window appears while the router is being configured.

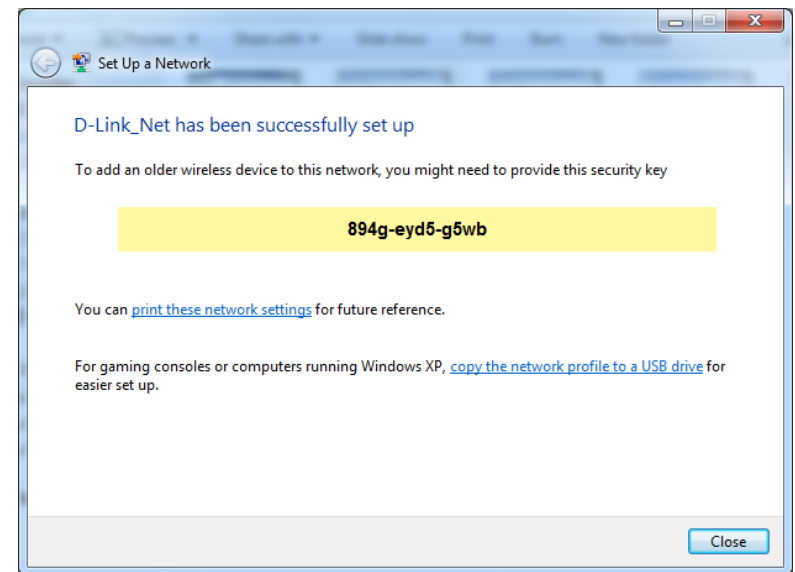
Wait for the configuration to complete.



8. The following window informs you that *WPS* on the router has been setup successfully.

Make a note of the security key as you may need to provide this security key if adding an older wireless device to the network in the future.

9. Click **Close** to complete *WPS setup*.



Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

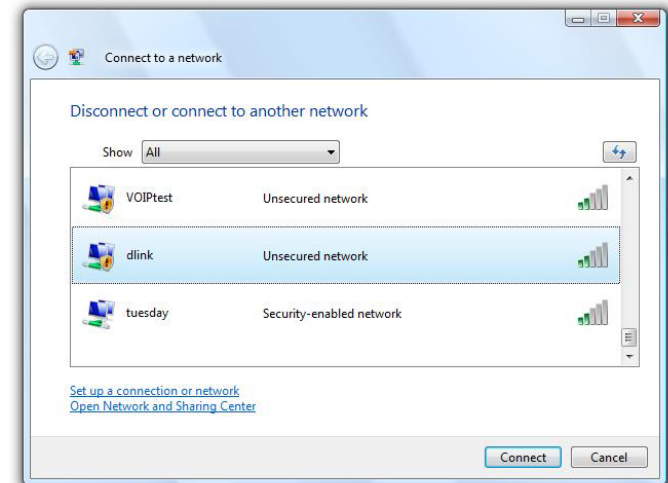
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the **wireless computer icon** in your system tray (lower-right corner next to the time). Select **Connect to a network**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your **TCP/IP** settings for your wireless adapter. Refer to the *Networking Basics* section in this manual for more information.



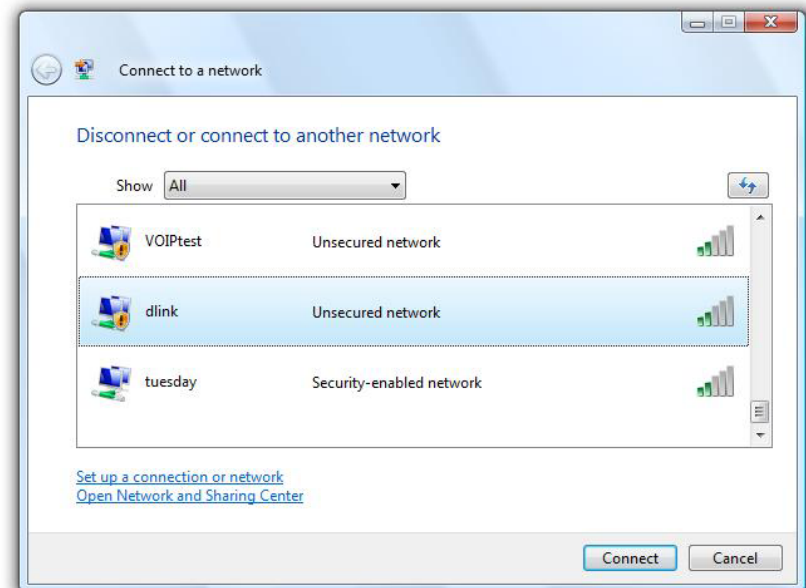
WPA/WPA2

It is recommended to enable wireless security (*WPA/WPA2*) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the **wireless computer icon** in your system tray (lower right corner of screen). Select **Connect to a network**.

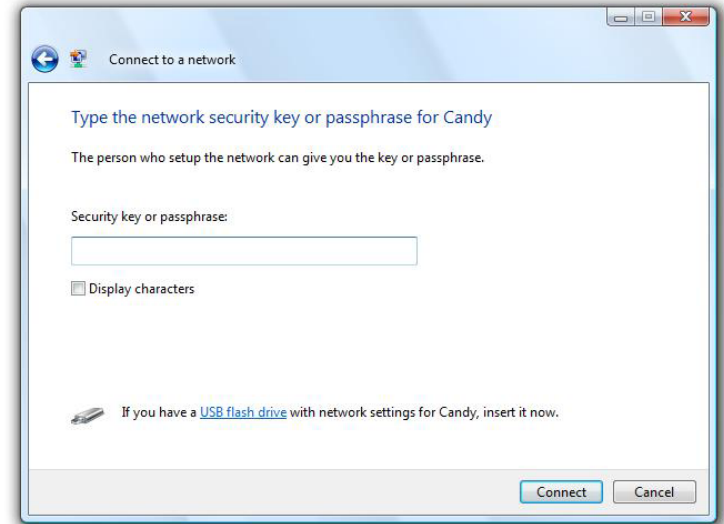


2. Highlight the wireless network (**SSID**) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

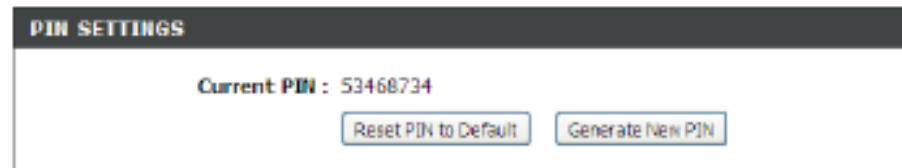


WPS/WCN 2.0

The router supports *Wi-Fi Protection*, referred to as *WCN 2.0* in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the router or third party software.

When you first set up the router, *Wi-Fi Protection* is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

If you are running Windows Vista®, log into the router and click the **Enable** box in the **Basic > Wireless** section. Use the **Current PIN** that is displayed on the **Advanced > Wi-Fi Protected Setup** section or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.



If you are using third party software to set up *Wi-Fi Protection*, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured router.

Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

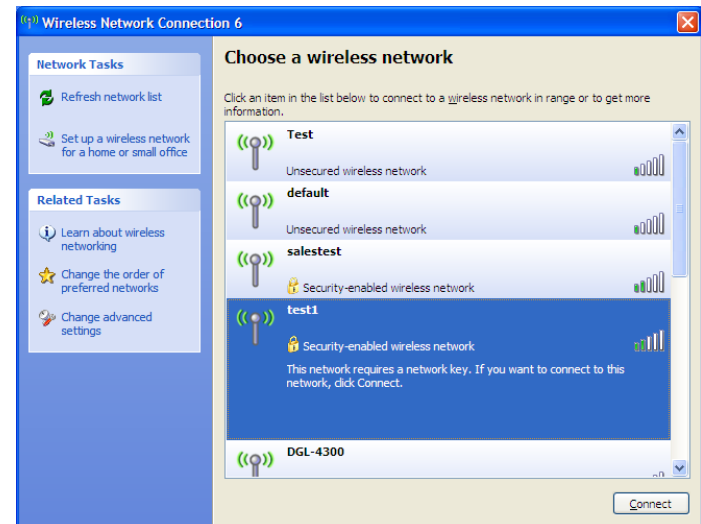
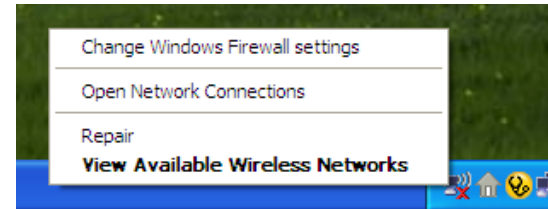
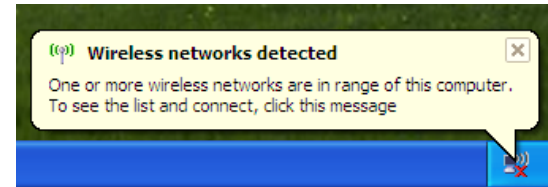
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the **wireless computer icon** in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

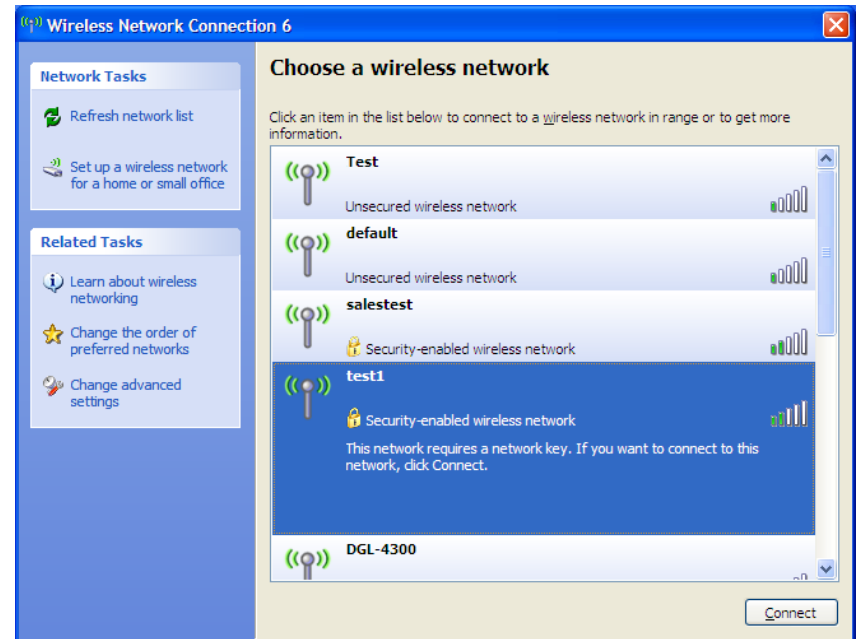
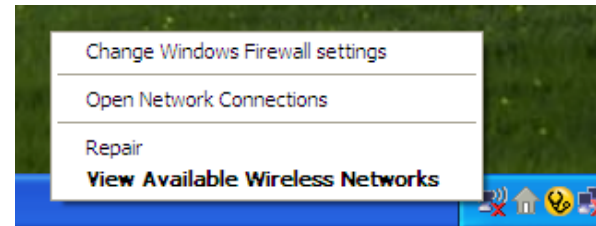
If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the *Networking Basics* section in this manual for more information.



WPA/WPA2

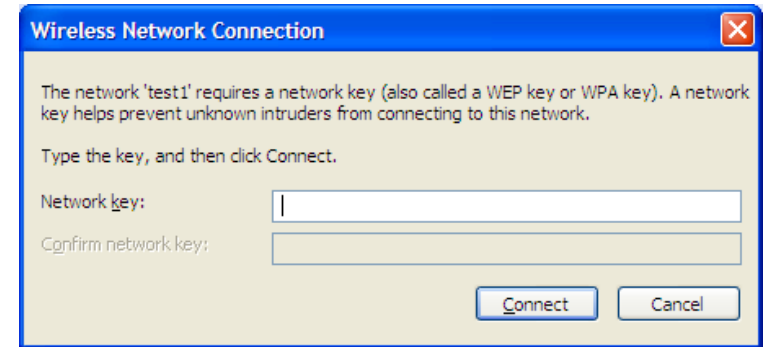
It is recommended to enable *WPA* on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the **wireless computer icon** in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.
2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The Wireless Network Connection box will appear. Enter the WPA-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-855L. Read the following descriptions if you are having problems. The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Microsoft Internet Explorer® 7 and higher
 - Firefox
 - Chrome
 - Apple Safari 4 and higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
 - Go to **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
 - Click the **Connection** tab and set the dial-up option to **Never Dial a Connection**. Click the **LAN Settings** button. Make sure nothing is checked. Click **OK**.
 - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
 - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive e-mails when connecting through my router?

If you are having a problem sending or receiving e-mail, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, XP, Vista®, and 7 users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:
Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms
C:\>
```


You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by two (2) until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, let's say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your e-mail. If changing the MTU does not resolve the problem, continue changing the MTU in increments of 10.

Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A wireless router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks: Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a Wireless Local Area Network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point, the signal can travel up to 300 feet. With an outdoor access point, the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers and other devices that operate on batteries.

Who uses wireless?

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office or business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check e-mail, instant message, etc.
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere, not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to the Internet from remote locations like Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

A wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let your next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting two wireless computers for peer-to-peer communication.

An Infrastructure network contains an access point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Networking Basics

Check your IP address

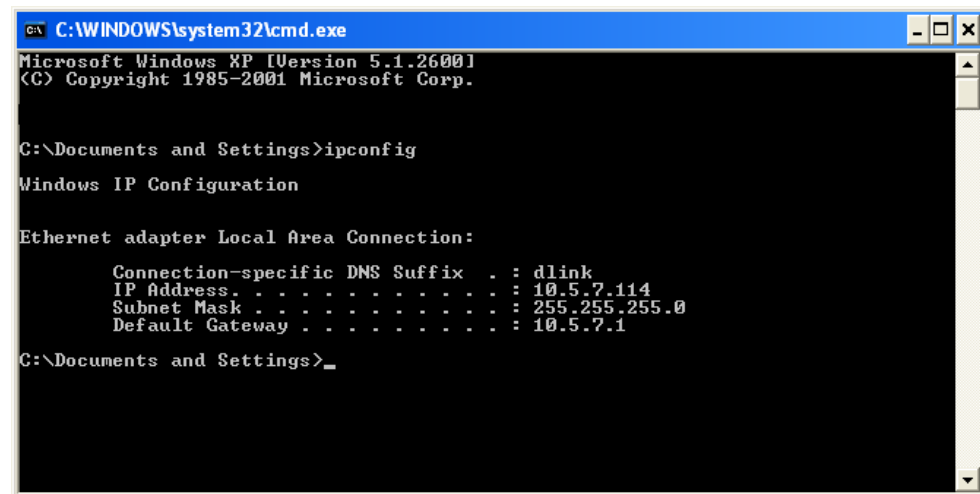
To check your IP address, please follow the steps below.

Click on **Start > Run**. In the run box type **cmd** and click **OK**. (Windows® 7/Vista® users type **cmd** in the **Start Search** box.)

At the prompt, type **ipconfig** and press **Enter**.

This will display the IP address, subnet mask and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address . . . . . : 10.5.7.114
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.5.7.1

C:\Documents and Settings>_
```

Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

- Step 1**
- Windows® 7 - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center.**
 - Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections.**
 - Windows® XP - Click on **Start > Control Panel > Network Connections.**
 - Windows® 2000 - From the desktop, right-click **My Network Places > Properties.**

Step 2
Right-click on the **Local Area Connection** which represents your network adapter and select **Properties.**

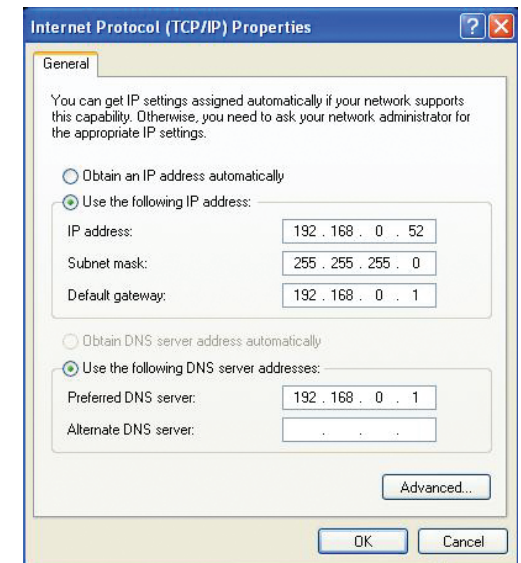
Step 3
Highlight **Internet Protocol (TCP/IP)** and click **Properties.**

Step 4
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (i.e., 192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5
Click **OK** twice to save your settings.



Technical Specifications

Standards

- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11a
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab

Security

- WPA™ - Personal/Enterprise
- WPA2™ - Personal/Enterprise

IEEE 802.11n (HT20/40)¹

- | | |
|-------------------|-------------------|
| • 216Mbps (450) | • 195Mbps (405) |
| • 173.3Mbps (360) | • 144.4Mbps (300) |
| • 130.7Mbps (270) | • 130Mbps (270) |
| • 115.6Mbps (240) | • 86.7Mbps (180) |
| • 72.2Mbps (150) | • 65Mbps (135) |
| • 57.8Mbps (120) | • 43.3Mbps (90) |
| • 28.9Mbps (60) | • 21.7Mbps (45) |
| • 14.4Mbps (30) | • 7.2Mbps (15) |

Frequency Range² (North America)

- 2.412GHz to 2.462GHz (802.11g/n)
- 5.15GHz to 5.825GHz (802.11a/n)³

Operating Temperature

- 32°F to 104°F (0°C to 40°C)

Humidity

- 95% maximum (non-condensing)

Safety & Emissions

- FCC
- IC

Dimensions

- L = 4.37 inches
- W = 3.66 inches
- H = 5.71 inches

Warranty

- 1 Year

¹ Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g, and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

² Frequency Range varies depending on country's regulation

³ The DIR-855L does not include 5.25-5.35GHz & 5.47-5.725GHz in some regions.

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g., DIR-855L)
- Hardware Revision (located on the label on the bottom of the router (e.g., rev A1))
- Serial Number (s/n number located on the label on the bottom of the router).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:

(877) 453-5465

Internet Support:

<http://support.dlink.com>

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Phone Support:

(800) 361-5265

Internet Support:

<http://support.dlink.ca>

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Please direct all inquiries to:
E-mail: GPLCODE@DLink.com
Snail Mail:
Attn: GPLSOURCE REQUEST
D-Link Systems, Inc.
17595 Mt. Herrmann Street
Fountain Valley, CA 92708

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17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware and Power Supply: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days (“Software Warranty Period”), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link’s products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold “As-Is” without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim (USA):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

Submitting A Claim (Canada):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.
- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.ca/>.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

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TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Operations in the 5.15-5.25GHz / 5.470 ~ 5.725GHz band are restricted to indoor usage only.

IMPORTANT NOTICE:**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

If this device is going to be operated in 5.15 ~ 5.25GHz frequency range, then it is restricted in indoor environment only. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

ICC Notice:

Operation is subject to the following two conditions:

- 1) This device may not cause interference and
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- (i) The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems;
- (ii) The maximum antenna gain (2dBi) permitted (for devices in the band 5725-5825 MHz) to comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate, as stated in section A9.2(3).

In addition, users should also be cautioned to take note that high-power radars are allocated as primary users (meaning they have priority) of the bands 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

- (1) Ce périphérique ne doit pas causer d'interférence et.
- (2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.

Registration

Register your product online at registration.dlink.com



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

Version 1.0
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